

**FEDERAL AID TO COMMUNITY COLLEGES AND ITS  
INFLUENCE UPON RESOURCES AVAILABLE FOR  
EQUALIZATION OF EDUCATIONAL OPPORTUNITY, 1969-1971**

**By**

**CHARLES RICHARD PAULSON**

**A DISSERTATION PRESENTED TO THE GRADUATE  
COUNCIL OF THE UNIVERSITY OF FLORIDA IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY**

**UNIVERSITY OF FLORIDA  
1973**

378

FO

1973

P332f

C.2

EDUCATION  
LIBRARY

UNIVERSITY OF FLORIDA



3 1262 08552 7454

### **ACKNOWLEDGMENTS**

The writer wishes to acknowledge the efforts of the many persons who took an interest in the preparation of this study.

An expression of deep appreciation is extended to Dr. James L. Wattenbarger, chairman, and to the other members of the committee, Dr. Dayton Y. Roberts and Dr. Irving J. Goffman.

A special word of thanks is also extended to the staff of the U.S. Office of Education and the staff of Senator Lawton Chiles for assistance in collecting data for this study.

# TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS . . . . .	iii
LIST OF TABLES. . . . .	ix
ABSTRACT. . . . .	x
CHAPTER	
I INTRODUCTION . . . . .	1
The Problem. . . . .	4
Statement of the Problem . . . . .	4
Delimitations. . . . .	5
Limitations. . . . .	6
Justification for the Study. . . . .	6
Assumptions. . . . .	7
Definition of Terms. . . . .	8
Review of Related Literature . . . . .	9
Study Design . . . . .	17
Data Collection. . . . .	18
Data Treatment . . . . .	19
Organization of the Research Report. . . . .	19
NOTES. . . . .	21
II THE DEVELOPMENT OF FEDERAL POLICY FOR POST- SECONDARY EDUCATION. . . . .	23
History of Federal Support of Higher Education Through World War II . . . . .	23
The Founding Fathers' Concept of Federal Role . . . . .	23
The Federal Role Through the Land Grant Colleges and Universities. . . . .	26
Federal Cooperation with Institutions of Higher Education in Response to Crises . . . . .	28
The Experience of the Second World War Characteristics of Federal Aid Programs Through World War II . . . . .	29
	30

# CHAPTER

	Page
Trends in Federal Policy for Post-Secondary Education Since 1947 . . . . .	32
Presidential Commissions and Task Forces . . . . .	33
The President's Commission on Higher Education (1947) . . . . .	33
Post-secondary education defined as investment . . . . .	35
The need for extending equality of opportunity for post-secondary education. . . . .	36
The Federal role recommended by the Commission . . . . .	37
Proposed role for community colleges . . . . .	39
Reaction to the recommendations of the Commission . . . . .	40
The President's Committee on Education Beyond the High School (1956). . . . .	41
Reaction to the Committee's Proposals. . . . .	44
President's Task Force on Higher Education (1970) . . . . .	45
The Proposals of Non-Government Commissions. . . . .	47
The Educational Policies Commission. . . . .	47
The Carnegie Commission: Open Door Colleges . . . . .	49
Interest in a Comprehensive Policy, the Educational Commission of the States . . . . .	50
The American Council on Education. . . . .	51
U. S. Department of Health, Education and Welfare, Office of Education . . . . .	52
The Federal Role Defined in Legislation in Support of Higher Education. . . . .	53
The NDEA, a Turning Point in Public Policy . . . . .	53
The Higher Education Facilities Act. . . . .	55
Vocational Education Act of 1963 . . . . .	57
Higher Education Act . . . . .	58
The Administration's Program (1970). . . . .	60
Congressional Intent in Extending Equality of Opportunity. . . . .	62
Summary Observation. . . . .	65
NOTES. . . . .	67

**CHAPTER  
III**

**LEGISLATIVE INTENT AND PROVISION OF THE  
SELECTED AID PROGRAMS. . . . .**

**Page**

<b>Manpower Development and Training Act-- Public Law 87-415. . . . .</b>	<b>71</b>
<b>Manpower Development and Training Act, Title I--Manpower Requirements and Utilization. . . . .</b>	<b>72</b>
<b>Manpower Development and Training Act, Title II--Training and Skill Develop- ment Programs. . . . .</b>	<b>74</b>
<b>Manpower Development and Training Act, Title III--Miscellaneous . . . . .</b>	<b>77</b>
<b>Higher Education Facilities Act of 1963-- Public Law 88-204. . . . .</b>	<b>78</b>
<b>Higher Education Facilities Act, Title I-- Grants for Construction of Under- graduate Facilities. . . . .</b>	<b>82</b>
<b>Vocational Education Act of 1963--Public Law 88-210 and the Vocational Amendments of 1968. . . . .</b>	<b>84</b>
<b>Vocational Education Act of 1963 . . . . .</b>	<b>84</b>
<b>Vocational Education Amendments of 1968. . . . .</b>	<b>88</b>
<b>Nurse Training Act of 1964 and Allied Health Professions Act of 1966--Public Laws 88-581 and 89-751. . . . .</b>	<b>88</b>
<b>Nurse Training Act of 1964--Public Law 88-581 . . . . .</b>	<b>89</b>
<b>Allied Health Professions Act of 1966-- Public Law 89-751. . . . .</b>	<b>92</b>
<b>Allied Health Professions Act, Construction Grants. . . . .</b>	<b>92</b>
<b>Allied Health Professions Act, Grants to Improve the Quality of Training Centers. . . . .</b>	<b>93</b>
<b>Allied Health Professions Act, Loan Funds for Health Professions Student Loans. . . . .</b>	<b>95</b>
<b>Allied Health Professions Act, Loan Funds for Schools of Nursing . . . . .</b>	<b>96</b>
<b>Allied Health Professions Act, Opportunity Grants . . . . .</b>	<b>97</b>

CHAPTER	Page
Higher Education Act of 1965--Public Law 89-329 . . . . .	98
Higher Education Act of 1965, Title I--Community Service and Continuing Education Programs . . . . .	98
Higher Education Act of 1965, Title III--Strengthening Developing Institutions. .	100
Higher Education Act of 1965, Title IV--Student Assistance . . . . .	104
The Education Professions Development Act--Public Law 90-34 . . . . .	106
NOTES. . . . .	108
IV RELATIONSHIPS OF INCOME AND ENROLLMENT OF FEDERAL ALLOTMENTS ANALYSIS OF THE DATA. . .	110
Categories and Codes of the Variables. . . .	111
Higher Education Act of 1965, Title I--Community Service and Continuing Education Programs . . . . .	118
Higher Education Act of 1965, Title III--Strengthening Developing Institutions. .	119
Higher Education Facilities Act of 1963, Title I. . . . .	119
Vocational Education Act of 1963 . . . . .	121
Education Professions Development Act. . .	122
Manpower Development and Training Act. . .	123
Nurse Training Act of 1964, Special Projects Grants, as Amended by the Allied Health Professions Act. . . . .	123
Nurse Training Act of 1964, Nursing Student Loans, as Amended by the Allied Health Professions Act. . . . .	124
Nurse Training Act of 1964, Nursing Scholarships . . . . .	125
Allied Health Professions Act, Basic Improvement Grants . . . . .	126
Higher Education Act of 1965, Title IV--Educational Opportunity Grants . . . . .	127
Higher Education Act of 1965, Title IV--Work Study Grants. . . . .	127
V SUMMARY, CONCLUSIONS AND IMPLICATIONS. . . . .	128
Conclusions. . . . .	130
Common Intent Among Programs of Aid to Community Colleges . . . . .	131

CHAPTER	Page
Factors Determining Allocations. . . . .	132
Equalization of Federal Aid Programs to Community Colleges. . . . .	133
The Relationship Between Allotments and Enrollment . . . . .	134
Implications . . . . .	135
APPENDICES. . . . .	137
APPENDIX	
A	FEDERAL FUNDS OBLIGATED TO COMMUNITY COLLEGES, BY STATE . . . . .
	138
	Higher Education Act, Title I. . . . .
	139
	Higher Education Act: Strengthening Developing Institutions. . . . .
	141
	Higher Education Act: Personnel Development. . . . .
	143
	Higher Education Facilities Act, Title I . . . . .
	145
	Vocational Education Act of 1963 . . . . .
	147
	Education Professions Development Act- Title V-E, Training Institutes . . . . .
	149
	Manpower Development Training Act. . . . .
	151
	Nursing Special Project Grants . . . . .
	153
	Nursing Student Loans. . . . .
	155
	Nursing Scholarship. . . . .
	157
	Allied Health Professions Basic Improve- ment Grants. . . . .
	159
	Higher Education Act: Educational Opportunity Grants . . . . .
	160
	Higher Education Act: College Work Study Grants . . . . .
	162
B	ADVISORY COMMISSIONS ON HIGHER EDUCATION . . . . .
	164
	President's Commission on Higher Education . . . . .
	165
	The President's Committee on Education Beyond the High School . . . . .
	166
	The Educational Policies Commission. . . . .
	168
	President's Task Force on Priorities in Higher Education . . . . .
	169
C	STATE ENROLLMENTS IN COMMUNITY COLLEGES, OCTOBER, 1971. . . . .
	170
D	PER CAPITA PERSONAL INCOME, 1971 . . . . .
	173
	BIBLIOGRAPHY. . . . .
	176
	BIOGRAPHICAL SKETCH . . . . .
	181



# LIST OF TABLES

TABLE		Page
1	CORRELATION OF STATE PER CAPITA INCOME (Y) AND EXPENDITURES PER STUDENT ENROLLED IN COMMUNITY COLLEGES ( $X_e$ ) FOR TWELVE FEDERAL PROGRAMS . . . . .	115
2	CORRELATION OF STATE ENROLLMENT (E) AND STATE ALLOTMENTS ( $X_s$ ) FOR COMMUNITY COLLEGES IN TWELVE FEDERAL PROGRAMS. . . . .	117

Abstract of Dissertation Presented to the Graduate Council  
of the University of Florida in Partial Fulfillment of the  
Requirements for the Degree of Doctor of Philosophy

FEDERAL AID TO COMMUNITY COLLEGES AND ITS  
INFLUENCE UPON RESOURCES AVAILABLE FOR  
EQUALIZATION OF EDUCATIONAL OPPORTUNITY, 1969-1971

By

Charles Richard Paulson

August, 1973

Chairman: Dr. James L. Wattenbarger  
Major Department: Educational Administration

The primary problem was to determine whether twelve programs of Federal aid to community colleges have an equalizing or disequalizing impact upon the financial abilities of the States to support post-secondary education; and whether Federal allotments to the States under those programs are directly related to statewide enrollments. Equalization, in this study, was defined as a provision in an aid program to community colleges which gives statutory recognition to underlying differences in the relative capacities of the States for financial support of post-secondary education, and directs allocation in such a manner as to cause allotments to vary inversely with the financial capacity of the States. The result of equalization would be to reduce the differentials in financial capacity to support post-secondary education.

## Procedures

Allotments were examined under each of the Federal aid programs to each of the States, which constituted the whole universe as defined for this study. Thus no sampling techniques were appropriate.

Funds allocated were treated as per state allotments and also as per student allotments. State per capita income served as the financial ability indicator. Product-moment correlations were performed to determine the correlations between allocations per student in community colleges and state per capita income under each aid program; and the correlations between statewide enrollment and per state allocations under each aid program.

Through content assessment the data collected about each program, especially the legislation establishing the programs, were used to determine the intent of each program and the procedures for allocating funds. Analysis of coefficients provided a description of the equalizing or disequalizing tendencies of the separate programs and description of the relation between enrollment and allocations under each of the programs.

## Conclusions and Implications

Several conclusions of this study are summarized:

1. Other variables and the provisions of allocation formulas operate, in most of the programs considered, to override equalizing provisions.

Only two of twelve programs equalized to a significant degree.

2. Allocation procedures for Federal aid programs may not produce the results intended. The distribution of benefits reflects only to a limited degree the stated intent of increasing opportunity for the economically disadvantaged.
3. Categorical aid generally does not provide specific or consistent equalization of differences in financial capacity to support post-secondary education.
4. Federal aid programs which are more general in nature appear to equalize opportunities for post-secondary education to a greater degree.

## CHAPTER I

### INTRODUCTION

Federal support of higher education was established early in the history of the United States. Subsequent legislation, especially in the last decades, brought the magnitude of the Federal role to such a substantial level that determination of priorities among the possible public policies has very significant implications for the development of technology and social patterns.

Kenneth Ashworth notes the rapid increase in Federal participation:

Federal expenditures in higher education increased between 1956 and 1966 by 434 percent from \$655 million to \$3.4 billion . . . federal expenditures in higher education will further increase. . . . Too many of us are acting as if federal participation in higher learning were still an uncertain experiment, instead of the stable and growing reality which it is.<sup>1</sup>

The role of the Federal Government in the support of higher education relative to that of other sources of revenue is noted by the Carnegie Commission on Higher Education.

Private funds are presently providing some 50 percent of the total revenue of colleges and universities with the federal government providing approximately 20 percent, and the state and local governments providing approximately 30 percent.<sup>2</sup>

The constitutionality of such participation has been clearly established. "President Buchanan in 1857 vetoed the first version of the Morrill Act because he thought it was unconstitutional, but five years later this view was wholly discarded when Congress again passed the Act and it was signed into law by President Lincoln."<sup>3</sup> M. M. Chambers explained that Federal activities in the education field, which have grown over the years, were performed under expanding interpretations of the general welfare clause:

The constitution itself, limiting the powers of the Federal government and maximizing those of the states (tenth Amendment), makes no mention of education. From this it can be reasoned that it was intended to be exclusively a state responsibility; but the evolution of society has long since brought the view that there can and indeed must be Federal participation in its financial support, and that this can be soundly warranted under the Preamble clause . . . "to provide for the general welfare."<sup>4</sup>

The first efforts of the Federal Government to assist the states in the support of higher education were in the form of land grants, as in the Ordinance of 1862; but assistance in this century has been largely through monetary aid. Present Federal programs are frequently categorical aid, that is, they involve expenditures under specific legislation in an attempt to solve specific problems and meet needs of national interest which have been identified by Congress. Various authors have recommended the establishment of an overall and ongoing Federal policy. Kenneth Ashworth listed the range of goals on which such an overall and ongoing policy could be based: These bases for Federal

policy are the extension of equality of educational opportunity, the improvement and maintenance of quality and excellence in education, public service and research.<sup>5</sup>

One of the goals, the deliberate extension of equality of educational opportunity, has been incorporated into the philosophy of the community college movement in this country. However, support of equalization of opportunity requires a long term and encompassing commitment; and requires care to ensure that the mechanisms and practices involved in funding programs do, in fact, further the intent of the programs.

In any discussion of equalization, various definitions arise. Equalization may be defined as an allocation of a uniform amount of Federal aid to each state. It may mean an equal allocation per person. Alternatively, equalization may mean allocation designed to raise the educational level of individuals in each state to a national standard. It is often assumed that increases in financial support of education can raise the quality of educational output. Under such an assumption the following will serve as the definition of equalization for purposes of this study:

Equalization is a provision in a grant program, either in the allocation or matching, or both, which gives some statutory recognition to underlying differences in the States' relative capacities to raise funds from their own resources for financing a joint Federal-State program, in order to achieve more uniform standards throughout the Nation.<sup>6</sup>

According to a report by the Advisory Commission on Intergovernmental Relations, there does seem to be an

inverse relation between per capita income and the distribution of all Federal grants. In other words, the poorer states are receiving greater shares of Federal grants per capita than are the wealthier states.<sup>7</sup> However, the relation is small and not clearly of statistical significance.

This investigation will examine the intent of specific legislation for support of higher education with regard to equalization of educational opportunities; and the extent to which funding for community colleges under the programs is consistent with the given intent.

### The Problem

#### Statement of the Problem

The primary problem is to determine the relationships, if any, that exist between the level of expenditures to the community colleges, by State, under selected Federal programs and the level of per capita income; and the level of enrollment in the respective States.

The secondary problems are listed below:

1. What is the intent of the respective programs, in terms of the provisions authorized in the legislation, especially procedures for allocating funds.
2. How do those procedures contribute to tendencies to equalize or disequalize in relation to the financial abilities of the states?



3. To what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per community college student enrolled and the amount of per capita personal income?
4. In respect to each separate program, to what extent is there a direct or an inverse relation between the level of Federal expenditure to the respective state and the level of enrollment by state?

#### Delimitations

The study includes the delimitations given below:

1. The study, and its conclusions, was restricted to the following Federal programs as extant in 1971: the Higher Education Act of 1965; the Higher Education Facilities Act; the National Defense Education Act; the Adult Education Act of 1966; the Manpower Development Training Act; Vocational Education Act of 1963; Nurses' Training Act of 1964 and Allied Health Professions' Act of 1966.
2. The data are based on comparisons among the States and for the states in total. It does not discriminate among counties, community college districts, municipalities or other subdivisions of individual states.

### Limitations

The following limitations obtain:

1. Personal income is considered to be the most useful and reliable measure of wealth for studying the relative financial abilities of the states to support education and the data are regularly available for individual states.<sup>8</sup>
2. The data in the study does not reveal the distribution of family incomes represented in the respective state enrollments. If enrollments in some states include a greater proportion of persons from low income families, the equalizing impact of Federal funds would be increased. Although we do not have data to ascertain the distributions, we assume the distributions to be similar in all states.

### Justification for the Study

This study is an examination of the impact of Federal programs for the support of community colleges. It parallels similar research of the National Education Finance Project, which examined the impact of selected Federal programs for support of elementary and secondary schools. The intent of those studies was outlined by Bedenbaugh:

This study was one of several designed as part of the National Education Finance Project. . . . A major purpose of the NEFP is the conceptualization of alternative models for financing public education in the United States.<sup>9</sup>

The need for more information in order to conceptualize alternatives for funding and distributing funds in programs to support higher education is indicated by Howard Bowen:

The present system of higher education is admittedly complex . . . partly to the historic fact that colleges and universities have been free, and pressed by financial need to obtain money wherever it could be found. The result is a variegated, perhaps a bit tattered, crazy quilt of financial devices and practices. It is hard to explain this financial system in terms of principles . . . The policy problem before the nation at this time is to modify these complex financial devices in ways that will help attain the several broad objectives we hold for higher education.<sup>10</sup>

In addition to the direct effect of the devices or formulas used to support particular programs there are indirect effects. Federal taxation and expenditure for support of higher education alters the allocation of other goods and services, and the distribution of wealth. The nature of the indirect effects will be influenced by the specific funding formula.

This study, together with other studies, such as those of the National Education Finance Project, will contribute to the body of information and principles from which models of education finance can be constructed.

#### Assumptions

The basic assumptions involved in the study are listed below:

1. The amount of personal income is a reliable indicator of the relative financial ability among states to support higher education.

2. There is a high degree of homogeneity among states in their needs for higher education.
3. An increase in financial resources available for higher education does in fact increase the educational opportunity and attainment; and that equalization of resources will contribute to the equalization of educational achievement.
4. The distribution of family incomes represented in the respective state enrollments are similar.

#### Definition of Terms

Disequalization - A taxation or distribution program which increases the differences in resources available to the respective states for the financing of education.

Equalization - A provision in a taxation or distribution program which gives some statutory recognition to underlying differences in the states' relative capacities to raise funds from their own resources for financing a joint Federal-State program.

Higher Education - The term higher education, as used by the President's Commission on Higher Education, included other forms of post-secondary education than traditional college and university curricula. In the legislation higher education and post-secondary education are used interchangeably. In this paper higher education is broadly construed and is synonymous with post-secondary education.

National Income - The aggregate earnings of labor and property which arise from the current production of goods and services by the nation's economy.

Per Capita Personal Income - For a nation this is total national personal income divided by the number in the population; and for a state the total state personal income divided by the state's population.

Personal Income - Income payments to individuals or the current income received by persons from all sources, inclusive of transfers from government and exclusive of transfers among persons. While not a fully comprehensive measure it is used here as an approximation. Further, the Federal legislation being considered in this study uses this measure when wealth is to be a factor in allocation to the States, thus the particular measure is most closely related with the Federal policy being considered.

#### Review of Related Literature

The review of literature, which is extended in Chapter II, identified the trend in enrollment; the demand for public policy concerning higher education. The need to identify the practices and policies that constitute Federal policy is stated by Ashworth:

As long as the magnitude of involvement of the Federal government in higher education was relatively small, the impact of its programs on the colleges and universities, and the conflicts and inconsistencies among such programs were not

sufficiently significant to cause major concern. However, with the marked growth in federal programs in recent years, and the need for an increasing commitment of federal funds to higher education in the years ahead, all parties concerned must become aware of the policy conflicts that arise. When such conflicts are resolved we need to know what compromises and sacrifices in goals and values are made. . . . The value of such understanding is not limited to the branches and agencies of the Federal government and the universities and colleges. . . . The issues the states encounter are in many cases similar to those the federal government faces vis-a-vis the institutions.<sup>11</sup>

The trends and growing need are reflected in enrollment increases, which are outlined by Ashworth:

Studies of future financial needs of public and private higher education have also intensified this interest with their conclusion that there is no turning back from large scale federal subsidies to higher education. . . .

Year	Number Enrolled (Higher Education)	Percentage of 18-21 Age Population
1870	52,000	1.68
1890	157,000	3.04
1918	441,000	6.00
1936	1,208,000	12.50
1947	2,338,000	25.20
1967	6,964,000	51.10

The ratio of total higher education enrollment to the college age population (eighteen to twenty-one years) has doubled on the average every twenty years since 1870. In less than 100 years (1870-1967) the percentage grew from 1.68 to over 50 percent, a numerical increase of from 52,000 to 6,964,000. . . . It is estimated that the 1975-76 school year the total credit enrollment in higher education will exceed 917 million.<sup>12</sup>

In addition, post secondary enrollment of persons over 21 has increased. The increasing role of the community college has been noted by many authors. The Carnegie

Commission on Higher Education, among others, has projected the role of the community college:

There is little doubt that community college enrollment will continue to grow rapidly in the 1970s and although enrollment may level off or decline in the 1980s for demographic reasons, it seems probable that by the year 2000, community college enrollment will be substantially above its present level and will account for an even higher proportion of undergraduate enrollment than it does today. Community colleges will be both more numerous and more broadly distributed geographically . . . and by 1980 at least 40 percent of all undergraduates should be in community colleges.<sup>13</sup>

It is important to note that the enrollment increase reflects not only a growth in the age group in the population, but is a function of change in the population. There is a clear increase in the portion of the population which persists through high school. For every 1,000 children entering the fifth grade in 1942-43 only 505 graduated in 1950; while for every 1,000 entering in 1959-60, an estimated 721 graduated in 1967.<sup>14</sup>

The increase in the portion of the population which persists through more years of public school is augmented by an increase in the portion who enroll in post-secondary education. This shift is documented by Willingham, and illustrated in the table below:

Year	Number of Colleges	First Time Enrollment FTE (Higher Education)	Ratio of FTE to High School Graduates
1948	1,808	617,000	.52
1958	1,903	862,000 (+40%)	.57
1968	2,491	1,908,000 (+121%)	.70

The ratio of .70 in 1968 is highly significant since it suggests that a much higher percentage of students are continuing their education after secondary school than has been typical for the past 80 years.<sup>15</sup>

Federal experience in financial support of higher education from the early land grants to the present Federal programs clearly establishes constitutionality. With few exceptions Federal legislation for financial support of higher education has encountered few constitutional challenges. Chambers,<sup>16</sup> Alexander,<sup>17</sup> and others have noted the extension of Federal participation under the general welfare clause.

While the legal basis for Federal participation is clearly established, questions arise about the manner in which expenditures are made. Although not specifically addressed to higher education the cases of *Serrano v. Priest* and *Rodriguez v. San Antonio Ind. School District* identify some important questions, which are pointed out by Alexander.

By establishing that "wealth is a suspect classification" and education is a "fundamental interest," the court brought the case within the strict scrutiny test. . . . This standard requires the state to show a "compelling state interest" to justify a suspect classification. . . . It tends to place the burden of proof on the legislature.<sup>18</sup>

The U. S. Supreme Court, in *Rodriguez v. San Antonio Ind. School District*, stated that education is not a fundamental interest which is guaranteed under the U. S. Constitution (although it may be under some state constitutions). But while not a constitutional obligation, the



Federal Government has expressed a policy in numerous acts which provide Federal support for higher education.

Alexander continues:

The fact is that the federal government has assumed the responsibility for financing a portion of the educational program . . . the federal government does not have a constitutional obligation to equalize among school districts or among states, but where it has assumed the responsibility for providing assistance to a certain type of child, it must treat them all equally regardless of where they are located or what their economic circumstances might be.<sup>19</sup>

The role of the Federal Government in higher education must be determined by the purpose of that education. Several authors, government agencies and quasi-public agencies have sought to identify, rationalize, or advocate various public stances for the Federal Government in respect to equalization. It may be argued that categorical grants insure the national defense. It may also be argued that the advantage of Federal support would occur through education and development of the citizenry.

Many commissions and agencies have joined in the evaluation of educational needs and the proper Federal role to meet those needs. Among them are the Eisenhower Commission, the Educational Policies Commission and the Carnegie Commission on Higher Education. A trend in recommendations for a Federal role is clear. The report of the President's Commission of Higher Education in 1947 indicated a concern for extending the opportunity for higher learning to a greater portion of the population. This concern is made

clear in a quotation selected from the Report of the President's Commission on Higher Education, 1947:

We shall have to educate more of our people at each level of the educational program, and we shall have to devise patterns of education that will prepare them more effectively than in the past for responsible roles in modern society.

The time has come to make education through the fourteenth grade available in the same way that high school education is now available.

The time has come to provide financial assistance to competent students in the tenth through fourteenth grades who would not be able to continue their education without such assistance.

The Federal Government assumes responsibility for supplementing State and local efforts in military defense against the Nation's enemies without; surely it may as justifiably assume responsibility for supplementing State and local efforts against educational deficiencies and inequalities that are democracy's enemies within.<sup>20</sup>

The President's Committee on Education Beyond the High School, in its Second Report to the President, indicated a continuing concern for educational opportunity. This concern was expressed by the Committee within the constraints that Federal aid could most constructively be limited to capital expenditures; addressed to a clear need of a temporary nature; and be organized in such a way that they would not detract from State and local autonomy. The Committee, among other things, recommended

That long-term Federal loans at low interest for the construction of income-producing facilities (such as dining halls and dormitories) continue to be made available to educational institutions.

The Committee recommends that Federal grants-in-aid on a matching basis, be made available, through procedures similar to those provided by Hill-Burton

Act, to assist as many types of nonprofit higher education institutions as possible to construct needed non-income producing facilities.

The Federal government should provide leadership, . . . But it should do those things only by methods which strengthen State and local effort and responsibility and, in the case of direct financial assistance, only through programs which are periodically reviewed and which are promptly terminated when no longer clearly justifiable. Finally, the Federal government should studiously avoid programs and policies which would carry the threat of either control or other adverse effects upon the educational institutions.<sup>21</sup>

A trend toward the general acceptance of extending higher education to a larger portion of the population and Federal assumption of increasing responsibility for financial support is outlined by Willingham:

More than 20 years ago the Truman Commission (1947) declared "The time has come to make education through the 14th grade available in the same way that high school education is now available." This prophetic statement stirred up enough excitement to require a lengthy rebuttal to critics. On the other hand similar sentiments expressed during the past ten years by such public groups as the Eisenhower Commission (1960), the Educational Policies Commission (1964), and the Carnegie Commission (1968) have been accepted without a ripple. Furthermore the Higher Education Facilities Act of 1963, and the Higher Education Act (1965), and the political acceptability of substantially broadened opportunity for higher education.<sup>22</sup>

In a doctoral dissertation which examined the policy-making role of the Federal Government, Bennion<sup>23</sup> focused on the mechanisms and decision-making processes involved in the Elementary and Secondary Education Act of 1965. Among the conclusions reported were: (1) There will be a much greater interdependence among the three levels of government

than there has been in the past. (2) The categorical nature of the aid establishes the Federal Government as a policy maker in education. And (3) the persons or agencies responsible for administering the Act become part of the policy making process.

Bedenbaugh<sup>24</sup> studied the equalization effect of ten federal programs for aid to elementary and secondary schools. He concluded that some of the programs equalized, some did not and some were not consistent. His conclusions include: (1) Allocation procedures for various aid programs may not produce the kinds of benefits and results intended. (2) There is a considerable amount of duplication. (3) Categorical aid does not lend itself to specific and/or consistent recognition of differences in relative ability. A better solution to financial equalization may be found in a program offering a more general kind of financial assistance.

The overall equalizing effect of Federal programs was studied by the Advisory Commission on Intergovernmental Relations.<sup>25</sup> The study compared 1961 per capita incomes with fiscal 1962 distributions of \$7 billion in Federal grants. The study concluded that there appears to be some equalizing tendency, but not a statistically significant one. The Commission suggests further that the total Federal grant package requires the poorer states to devote a larger share of their fiscal capacities than wealthier states in meeting required matching provisions.

### Study Design

The study will be an investigation across the fifty States, and the District of Columbia, which within the definition of the study is the total population; thus no sampling technique is considered. The Federal aid programs examined were selected because of all Federal programs for higher education they involve the most significant allocations for community colleges.

The study will investigate the relation between the expenditures under the Federal aid programs and the wealth of the respective states; and the relation between the level of expenditures under the Federal aid programs and the level of enrollment in the respective states. Per capita personal income will be used as a measure of relative financial ability of the states. It is assumed that personal income will be a proxy for fiscal capacity.

The legislation and public documents pertaining to each of the Federal programs will be examined to determine if the law expresses intent to equalize or disequalize. The level of expenditure per state will be examined for equalizing or disequalizing (inverse or direct) relation with the level of per capita income by state for each of the programs for 1971. And the level of expenditure per state will be examined for correlation with the level of enrollment by state for each of the fourteen programs for 1971.

Coefficients of correlation will be determined through a product-moment method of correlation. The possible correlation scores will fall between positive 1.00 and negative 1.00. Positive 1.00 would represent the most extreme disequalizing relation, and negative 1.00 the most extreme equalizing relation. Zero indicates no relation inverse or direct.

The product-moment correlations were determined by a computer program which was run at the University of Florida Computer Center. The program used was BMD 02D with Trans-generation which was developed at the Health Sciences Computing Facility, University of California at Los Angeles, revised May 5, 1969.

A null hypothesis will be used to test the significance of each coefficient. The null hypothesis, for each Federal program, was that there is no significant difference between the determined correlation score and zero correlation. The criteria for significance was set at the .05 level.

The alternative hypothesis was that there is a significant difference between a zero correlation and the determined correlation score. The alternative may take two forms. If the relation is negative, then an equalizing relation is inferred; and if the relation is positive, a disequalizing relation is inferred.

#### Data Collection

The first kind of data included the legislation itself and public documents which pertain to particular

Federal programs. The intent, the mechanisms and the funding formula for each individual program were identified.

In order to derive the coefficients of correlation, specific data were required on per capita income, expenditures by program, and community college enrollment. Sources for that material included the Survey of Current Business, the United States Office of Education and the American Association of Junior Colleges.

#### Data Treatment

The information gathered about the intent and the mechanisms for funding were used to describe each aid program. The impact of funding formulas and the various mechanisms in regard to achieving the intent of the legislation involved was examined.

Data was used as collected and published for per capita income by the Survey of Current Business; for expenditures by information secured directly from the United States Office of Education; and for enrollment from the Junior College Directory published by the American Association of Junior and Community Colleges. Definitions in the study were made to conform with those under which the above data were collected and published.

#### Organization of the Research Report

The study is reported in five chapters.

Chapter I contains an Introduction, Statement of the Problem, Delimitation and Limitations of the Study, Justification for the Study, Assumptions, Definitions and a Description of Procedures.

Chapter II reports a search of Federal legislation, policy statements, public documents, commission reports and the reports of quasi-public agencies. The report traces the exploration of policy alternatives, the identification of the national interest, and the development of Federal public policy in regard to extending the opportunities for higher education.

Chapter III presents the legislation and funding mechanisms of each of the Federal programs considered in the study.

Chapter IV reports the coefficients of correlation and indicates equalization relations. Each is reported separately, and the impact of the combined programs is concluded.

Chapter V presents a review of alternative goals and Federal policies which have been posed; the possible goals involved in extending opportunity in higher education; and recommended guidelines for policy which is consistent with the goals expressed.



## NOTES

1. Kenneth Ashworth, *Scholars and Statesmen* (San Francisco: Jossey-Bass Inc., 1972), p. 6.

2. Carnegie Commission on Higher Education, *Institutional Aid* (New York: McGraw Hill Book Co., 1972), p. 41.

3. M. M. Chambers, *Higher Education: Who Pays? Who Gains?* (Danville, Illinois: The Interstate Printers & Publishers, Inc., 1968), p. 233.

4. Ibid., p. 233.

5. Ashworth, p. 3.

6. Advisory Commission on Intergovernmental Relations, *The Role of Equalization in Federal Grants* (Washington, D. C.: U. S. Government Printing Office, January, 1964), p. 48.

7. Ibid., p. 27.

8. Roe L. Johns and Edgar L. Morphet, *Financing the Public Schools* (Englewood Cliffs, N. J.: Prentice Hall, Inc., 1960), p. 55.

9. Edgar Bedenbaugh, *Extent of Financial Equalization Among the States from Ten Programs of Federal Aid to Education* (Dissertation, University of Florida, Gainesville, Florida, 1970), p. 8.

10. Howard R. Bowen, "Financing the Aims of American Higher Education," *Financing Higher Education: Alternatives for the Federal Government*, Ed. Mel Orwig (Iowa City, Iowa: The American College Testing Program, 1971), p. 155.

11. Ashworth, p. 4.

12. Ibid., p. 5.

13. Carnegie Commission on Higher Education, *The Open Door Colleges* (New York: McGraw-Hill Book Co., 1970), p. 6.

14. Kenneth A. Simon and Grant W. Vance, Digest of Educational Statistics (Washington, D. C.: U. S. Government Printing Office, 1971), p. 7.

15. Warren Willingham, Universal Access to Higher Education (San Francisco: Jossey-Bass Inc., 1971), p. 15.

16. Chambers, p. 233.

17. Kern Alexander and Forbis Jordan, Constitutional Reform of School Finance (Gainesville, Fla.: National Education Finance Project, November, 1972), p. 76.

18. Ibid., p. 76.

19. Ibid., pp. 87-88.

20. President's Commission on Higher Education, Higher Education for American Democracy (Washington, D. C.: U. S. Government Printing Office, 1947).

21. The President's Committee on Education, Second Report to the President (Washington, D. C.: U. S. Government Printing Office, 1957).

22. Willingham, p. 16.

23. John W. Bennion, The Formation of Federal Educational Policy in the Elementary and Secondary Education Act of 1965 (Doctoral dissertation, The Ohio State University, 1966).

24. Bedenbaugh, 219 pp.

25. Advisory Commission on Intergovernmental Relations, Report of the Commission, The Role of Equalization in Federal Grants (Washington, D. C.: U. S. Government Printing Office, 1964), p. 63.

## CHAPTER II

### THE DEVELOPMENT OF FEDERAL POLICY FOR POST-SECONDARY EDUCATION

#### History of Federal Support of Higher Education Through World War II

##### The Founding Fathers' Concept of Federal Role

Federal support of education appeared early in the history of the Nation. Authority to legislate on matters of education was not among the enumerated powers in the Constitution; and therefore was reserved to the States under the Tenth Amendment. However, Congress has enacted many laws affecting education and providing support for all levels of education. And Federal support for education was evidenced early in the history of the Nation, before adoption of the Constitution. The Congress of the Confederation passed the Northwest Ordinance of 1787, providing for the reservation of public land for the endowment of seminaries of learning in the territories under Federal control.

The authors of the Constitution continued support of education. It is not clear, as is commonly supposed, that the founders intended to assign responsibility for education to the States rather than to the Federal Government. Babbidge and Rosenzweig call attention to a different dichotomy:

The plain fact of the matter is that, at the time of the creation of the new Constitution, there was no such thing as state responsibility for education. In higher education, responsibility was almost exclusively in the hands of religious bodies and private citizens . . . The nonpublic flavor of education at the time has prompted one historian to observe that a proposal for a Federal or State responsibility would have elicited a question of which church should control it.<sup>1</sup>

Thomas Jefferson supported the proposal of a National University which was made during the writing of the Constitution, and later proposed that the Federal Government assume some responsibility for the support of higher education. In his message to the Congress of 1806, Jefferson proposed that for the disposal of surplus Federal monies the great purposes of public education, roads, rivers and canals be added to the enumeration of federal powers. President Jefferson was referring to a shift from private to public rather than from state to federal, a point made clear in his message:

Education is here placed among the articles of public care, not that it would be proposed to take its ordinary branches out of the hands of private enterprise, which manages so much better all the concerns to which it is equal; but a public institution alone can supply those sciences which though rarely called for, are yet necessary to complete the circle, all the parts which contribute to the improvement of the country and some to its preservation.<sup>2</sup>

Clearly his proposal was not that the Federal Government should assume responsibility given to the states; but rather responsibility should be complementary to private (mainly church supported at that time) education. And clearly he proposed a complementary role for the benefit of the Nation as a whole.

That need for government involvement to provide those "parts" which would otherwise not be provided was perceived by other founders. Establishment of a National University was discussed during the writing of the Constitution. The proposed location was the District of Columbia. Therefore, at least some delegates felt, no further constitutional provision was necessary to empower the Federal Government to establish it at a later time. Babbidge and Rosenzweig indicate that support among national leaders continued:

Persistantly during the first quarter century of the newly reorganized Government, the several Presidents urged upon the Congress the creation of a National University. George Washington even willed 50 shares of stock in the Potomac Canal Company for the purpose . . . For our purpose it is important only to note the early and persistent notion that a Federal institution was necessary to "complete the circle" of higher learning in the United States.<sup>3</sup>

The notion of a National University was extended to the concept of a system of higher education. The American Philosophical Society conducted a contest in 1796, offering a prize for the best plan of education for the new Nation. Babbidge and Rosenzweig identified two characteristics which they had in common and which gave the plans significance:

First they all proceeded from the assumption that broad education was essential to the successful operation of the new Nation. Further the authors argued that the government of free people had a stake in, a degree of responsibility for, the provision of such education.<sup>4</sup>

Some of the functions which Americans expected of education in the young republic are identified by Henry Steele Commager:

No wonder education so quickly became the American religion; no wonder all the Founding Fathers were educators--Franklin, Washington, John Adams, John Dickenson, Noah Webster, and, above all, Thomas Jefferson. Education was to be the instrument of change, change of nature (Science was to make that possible) and of human nature. . . .

American schools were, and are, required to do a hundred and one things not expected of European schools: . . .

What America recognized almost by instinct, and what Europe is only slowly coming to recognize, is the immense range and variety of abilities necessary for the efficient functioning of modern society, and the potential role of schools and universities in providing these abilities.<sup>5</sup>

Those purposes of education are appropriate to and can only be implemented through a broad base in the population. The base in the early Republic was broad relative to historical experience and has continued to increase to the point where society expects universal elementary and secondary education. And the base of higher education has broadened. In respect to the current question of extending opportunity for post-secondary education Commager concludes:

The extension of schooling to the age of twenty is consistent with the American tradition, and with American faith in the Sovereign effect of education in our kind of society. It is, too, consistent with the demands of the new economy and technology which the next generation will have to confront.<sup>6</sup>

#### The Federal Role Through the Land Grant Colleges and Universities

The need for higher education was viewed as the need to train persons for specific roles and to promote scientific inquiry into the solution of specific problems.

Thus the role of both state and local government was addressed toward specific problems rather than toward the character of the population which universal opportunity for higher education would affect. However, the demand for more utilitarian higher-education available to larger portions of the population increased during the nineteenth century. Babbidge and Rosenzweig offer a conclusion for support of the Land Grant Act:

It was failure of the existing institutions, largely under private or religious control, but including State universities, to respond to popular will and wishes that led to the most noted and significant Federal action in the field of higher action during the nineteenth century. The so-called land-grant colleges were brought into being to provide a form of higher education not systematically viewed by established institutions and not available under circumstances that made it available to large numbers of people.<sup>7</sup>

This bold action is of special interest in defining the Federal role, because it required Congress to act on a dramatic scale in an area which, in the handsight of constitutional doctrine, might have been presumed to fall outside the scope of authority of the Federal Government. Indeed, in 1857 President Buchanan vetoed the first version of the Morrill Land-Grant Act because he thought it was unconstitutional; but this view was wholly discarded when the Act was passed by Congress again and President Lincoln signed the bill into law in 1862.<sup>8</sup> M. M. Chambers concludes that Federal participation has definitely been accepted as being warranted under the Preamble clause which states that one of the major purposes of the Federal Union

as being to provide for the general welfare.<sup>9</sup> The Act was so well accepted that in 1890 a second act was passed which extended the provision of the first, and under the terms of the second act annual appropriations are made for instructional purposes, and not limited to capital expenditures. Other legislation followed requiring Federal support of higher education, including the Smith-Lever and Smith-Hughes Acts.

Federal Cooperation with Institutions of Higher Education  
in Response to Crises

In response to the need which arose with the First World War institutions of higher education carried on federally supported research. In addition they operated training programs for military personnel, and conducted manpower studies and training programs.

The Depression of the 1930's also brought the cooperation of the Federal Government and the institutions of higher education to meet immediate needs. The Federal program of most importance to higher education was the student work program of the National Youth Administration. During the first year and one-half of operation 1,466 of 1,700 eligible colleges participated. The portion of students aided ran as high as 12 percent of the enrollment in 1935-36.<sup>10</sup>

The experience of Federal support during the depression is of interest to present public policy. One area of continuing concern is the amount of control which might



follow as a result of Federal support programs. In respect to that question, Axt writing in 1952 concluded:

The result was a growing opinion that the Federal government could promote the general welfare of higher education without undesirable by-products by aiding individual students, an opinion which was strengthened by the veterans educational program.<sup>11</sup>

### The Experience of the Second World War

The Second World War called forth two major Federal programs which have drastically affected higher education in America. The "G. I. Bill of Rights" was addressed to the problem of economic transition of veterans, and the great complex of federally sponsored research at universities was addressed to developing certain specific kinds of industrial and military capacity.

The experience of the Second World War clearly identified at least one specific conclusion. There remained no doubt that there was a clear national interest in the development of capacity of higher education. Babbidge and Rosenzweig said of the time:

Indeed, one of the major findings of World War II was the recognition on the part of those responsible for the national defense that highly trained manpower in fields only remotely related (in the public mind) to the national defense were in fact essential to that national defense. It has been observed that World War II was the "first war in human history to be affected decisively by weapons unknown at the outbreak of hostilities." . . . much credit had to be given to nonuniformed scientists, drawn largely from the Nation's colleges and universities . . . The defense of the Nation against an enemy being clearly no great argument to persuade . . . the public generally that the Federal Government

had a legitimate interest in the training of all persons whose skills bore in any way upon the nation defense effort.<sup>12</sup>

And since industrial and technological capacity has become identified as a major measure of military capacity, at least in the long run, that conclusion applies to a great segment of all vocations and professions.

#### Characteristics of Federal Aid Programs Through World War II

The two most consistent characteristics of Federal support programs through the Second World War were the categorical nature of grants addressed to immediate problems and the lack of a public policy which could serve as a means of coordinating efforts under various individual programs. The nature of Federal aid was in the form of categorical grants aimed at solving immediate problems. The role of higher education in most of these programs was incidental and involved insofar as higher education was a vehicle for advancing other factors. The basic motivations are suggested by Rivlin:

The original grants to the new states for the establishment of state universities was prompted by congressional desire to dispose of public lands on favorable terms . . . The Morrill Act . . . was primarily a measure to encourage scientific agriculture. . . .

During the 1930's the Federal financing of buildings or public institutions of higher education was part of a much larger program of public works designed to promote economic recovery by getting men to work . . . more recently, the principle objective of federal financing . . . has been to get the research

done in the interest of health and national defense . . . Even the National Youth Administration and the G. I. Bill of Rights . . . were temporary measures to aid recovery from the Depression and readjustment from war. They were abandoned when those emergencies were over.<sup>13</sup>

Since the goals for the programs were not established prior to immediate crises, but in response to immediate problems, federal policy for higher education was neither comprehensive nor systematic. The National Advisory Committee on Education, which was appointed in 1931 by President Hoover concluded:

The Federal Government has no inclusive and consistent public policy . . . in the field of education. Whatever particular policies it seems to be pursuing are often inconsistent with each other, sometimes in conflict. They suggest a haphazard development, wherein policies of far reaching effect have been set up as mere incidents of some special attempt to induce an immediate and particular efficiency.

Without a comprehensive forward looking and coherent public policy in regard to education, the present educational situation in the Federal Government can not be greatly improved.<sup>14</sup>

It is of interest here to note that the Committee on Higher Education appointed by President Eisenhower made the above quote in the beginning of its report and identified the lack of a consistent and comprehensive policy as a continuing problem in public policy toward education.

The main characteristics of the Federal experience in public policy for higher education through the Second World War were clear and consistent. They include:

1. Federal responsibility was established, from the founding of the Nation, for providing those "parts" of higher education not readily provided by private and state systems.
2. The role of the Federal Government was complementary, first to private education and then to state systems of higher education.
3. Federal aid was categorical, given to aid the solution of immediate problems.
4. The support of higher education was mainly incidental, and advanced insofar as its development advanced other goals, rather than being developed prior to the emergence of a problem.
5. Many and diverse programs were supported with neither a comprehensive policy nor an integrating system.

Trends in Federal Policy for Post-Secondary  
Education Since 1947

Several trends in Federal policy for post-secondary education have emerged in the decades since 1947. These include:

1. There has been an increase in the magnitude of Federal support, and in its continuing share of support for post-secondary education.

2. There has been a shift from categorical aid given in times of crisis, to continuing aid, to maintain desired capacities throughout the population.
3. There has been an increase in the effort to extend equality of opportunity for post-secondary education by removal of economic barriers, and of barriers of race, religion and creed.
4. There has been an increase in the variety and diversity of programs giving rise to the concept of diverse post-secondary level education rather than a limited scope of traditional higher education.
5. There have been attempts to coordinate the various federal, state and institutional programs.
6. There has been an increase in the acceptance of Federal support of private institutions of higher education.
7. There has been an increase, as implied by extension of equality of opportunity, to raise the minimum level of education through the whole population, rather than programs to fill immediate manpower needs for specific purposes.

Presidential Commissions and Task Forces

The President's Commission on Higher Education (1947)

In 1946, President Truman appointed a Commission on Higher Education to inquire into the proper role of the Federal Government in assisting higher education. George Zook, at the time President of the American Council on Education, was appointed chairman. The President charged the Commission with an examination of the functions of higher education in our democracy. His letter charged the Committee, in part, as follows:

Among the more specific questions with which I hope this Commission will concern itself are: ways and means of expanding educational opportunities for all young people; the adequacy of curricula, particularly in the field of international affairs and social understanding; the desirability of establishing a series of intermediate technical institutes; the financial structure of higher education with particular reference to the requirements for the rapid expansion of physical facilities. These topics of inquiry are merely suggestive and not intended to limit in any way the scope of the Commission's work.<sup>15</sup>

The Commission in discussing the implementation of its goals dealt rather specifically with three concepts. First the Commission identified higher education as an investment with benefits which would accrue to the whole public. Second the Commission identified barriers to equality of opportunity for higher education, and proposed means toward eliminating them. And the Commission clearly defined a specific role for the Federal Government as a partner with responsibility for support of higher education; the Commission further proposed a definite role for an expanded system of community colleges.

### Post-secondary education defined as investment

The Commission defined higher education as an investment with returns to the Nation as a whole, which would make higher education an interest of the Nation, not only in times of crisis, but as a continuing interest. The Commission reported:

Higher education is an investment in the social welfare, better living standards, better health, and less crime. It is an investment in higher production, increasing income, and greater efficiency in agriculture, industry, and government. It is an investment in a bulwark against garbled information, half truths, and untruths; against ignorance and intolerance. It is an investment in human talent, better human relationships, democracy and peace.<sup>16</sup>

The Commission felt that for the greatest benefit to both the individual and the Nation each person should be educated to the limit of his potential. Based upon testing during the Second World War the Commission concluded that at least 49 percent of the age group had the capacity to complete grades thirteen and fourteen, either in a college or a junior college. Perhaps one-third of the age groups should, the Commission felt, continue on to a baccalaureate degree. On that basis the Commission projected an enrollment of 4.6 million. This was more than twice the enrollment of 1950, and at that time less than half of the age group completed high school. The expectations of the Commission were far from the experience of the public and proved to be most controversial. And many persons in the educational

community were concerned that enrollments of such magnitude were not consistent with maintaining high standards of quality.

The need for extending equality of opportunity for post-secondary education

The Commission asserted that one of the gravest charges against the American society was that of failing to provide a reasonable equality of educational opportunity for its youth. The loss was not only that of the individual; in addition to the deprivation of the individual, the Commission felt, the Nation was deprived of potential leadership and competencies which it sorely needed. One of the first barriers cited by the Commission was that of financial need. The Commission argued against the availability of higher education as a function of wealth:

The democratic community cannot tolerate a society based upon education of the well-to-do alone. If college opportunities are restricted to those of higher income brackets, the way is open to the creation and perpetuation of a class society which has no place in the American way of life.<sup>17</sup>

Equal opportunity, as the Commission defined it did not mean identical education, but that education be available for all persons up to the limit of their potential.

Likewise the Commission argued against discrimination in the admission of college students on the basis of race, creed, color, sex, national origin or ancestry as an anti-democratic practice, which creates serious inequalities in higher education. In order to extend educational opportunity



and remove barriers of both financial and personal characteristics the Commission recommended the removal of all devices for restriction of admission, and proposed grants and fellowships (not loans) based on individual need. The Commission plan proposed support for about 20 percent of the non-veteran enrollment which the Commission had projected to be 4.6 million if its recommendations were followed.

#### The Federal role recommended by the Commission

The Commission made rather specific observations and recommendations for Federal responsibility and the role of the Federal Government in the federal system. The Commission noted the long Federal experience in response to specific problems, at specific times, and recommended a shift toward increased responsibility for general and continuing aid to education in order to insure the provisions of higher education as an integral and continuing factor of the American society. The Commission concluded:

For more than a century and a half the Federal Government has encouraged and supported specific fields of higher education. In times of national emergency it has expanded its support to give heightened recognition of the indispensable services which can be rendered to the Nation by colleges and universities. But aid for a few specific needs and temporary action in times of crisis are not enough. The time has come when the Federal Government must concern itself with the total and long-time needs for higher education. Higher education is no less important to the nation in calmer times than in periods of national crisis.<sup>18</sup>

The Commission recommended several steps to be put into effect in order to meet the needs and demands for higher education:

1. Public education through the fourteenth year of schooling be made available, tuition free, to all Americans able and willing to receive it, regardless of race, creed, color, sex, or economic and social status. . . .
2. Student fees in publicly controlled institutions be reduced. . . .
3. Immediate steps be taken to establish a national program of Federally financed scholarships and fellowships as a means of removing further the economic barrier and enabling our most competent and gifted youth to obtain for themselves and for society the maximum benefits to be gained from higher education.
4. Federal aid for the current operating costs of higher education be provided, beginning with an annual appropriation of \$53,000,000 in 1948-49 and increasing annually by \$53,000,000 through 1952-53. . . .
5. Federal aid for capital outlay be provided through an annual appropriation of \$216,000,000. Beginning with the fiscal year 1948-49. . . .
6. Adult education be extended and expanded, and the colleges and universities assume responsibility for much of this development.<sup>19</sup>

The Commission clearly held that the communities' wealth, or lack of wealth, should not determine access to higher education for the individual. The Commission defined the community as the "family writ large" and advocated a program of equalization, with a role for both the Federal Government and the various state governments:

The wide variation in the ability of the various States to support higher education makes a program of equalization imperative if a defensible minimum program of education is to be provided on a Nation-wide basis.<sup>20</sup>

Under the plan envisioned the Federal Government would contribute one-third of the total amount of the expansion. In order that each State shoulder its fair share, the Commission recommended that the States share in appropriations to be apportioned among the States on an equalized basis according to an objective formula. Geographic barriers were to be further removed by requiring all states to remove out-of-state restrictions and fees.

#### Proposed role for community colleges

The proposed increase in enrollment would of course create a need for more capacity. In addition, the greater range of students would require a greater range of curricula. And the Commission felt that the demands of technology and social systems required more diverse offerings at the post-secondary level. The Commission proposed that an expanded system of community colleges would best meet the need for more capacity and diversity. The conditions of low tuition and location in commuting distance of many students would bring the prospect of attendance within the horizons of many persons who were then capable but not attending. They were to offer a wider range of programs, including both transfer and terminal occupational training.

This Commission recommends as an important element in equalization, the establishment of free, public, community colleges which would offer courses in general education, both terminal and having transfer value, vocational courses suitably related to local needs, and adult education programs of varied character.<sup>21</sup>

### Reaction to the recommendations of the Commission

The report of the Commission met with public debate. It was, to that time, the most comprehensive planning for higher education, and spelled out more specifically than ever before a permanent and substantial role for the Federal Government. A role which was to be based on continuing needs of the technology and society. Axt, writing in 1952, gave a summary which concluded limited immediate impact:

The first large-scale venture in "planning" the future policy of the Federal Government toward higher education, the President's Commission, was not a striking success. In general its proposals were not accepted by the educational community, much less put into operation. The lack of acceptance resulted partly from the fact that the Commission did not adequately represent the major types of higher institutions. The major criticisms was that the President's Commission projected an expansion of enrollment that many believed to be incompatible with high standards of education.<sup>22</sup>

And Babbidge and Rosenzweig, writing in 1962, concluded that the impact of the President's Commission on Federal activities was not great.<sup>23</sup>

But the decade of the 1960's found experience more consistent with the proposals of the Commission. It is interesting to consider current experience 25 years after the report. The evaluation of half (49%) of the age population would be able to benefit from grades thirteen and fourteen, while one-third would be capable of upper division work, which met such strong opposition then, would not be extreme in the light of current experience. Subsequent legislation has provided substantial support for

diverse programs. And the community college expansion has, to a considerable extent, occurred, although not heavily supported by the Federal Government.

The general acceptance of universal post-secondary education as a social norm has not been achieved, but a substantial segment of the population accepts it as a possibility or goal for themselves and their families. The increased acceptance of this principle from the time of the Commission's Report to the present is outlined by Willingham:

More than 20 years ago the Truman Commission (1947) declared, "The time has come to make education through the 14th grade available in the same way that high school education is now available." This prophetic statement stirred up enough excitement to require lengthy rebuttal to the critics. On the other hand similar sentiments expressed during the past ten years by such public groups as the Eisenhower Commission (1957), the Educational Policies Commission (1964), and the Carnegie Commission (1968) have been accepted without a ripple. Furthermore the Higher Education Facilities Act (1963), and the Higher Education Act (1965), and the Higher Education Amendments (1968) represent concrete evidence of the political acceptability of substantially broadened opportunity for higher education.<sup>24</sup>

The President's Committee on Education Beyond the High School (1956)

The next Federal attempt to evaluate the whole of the Federal role was the President's Committee on Education Beyond the High School. This Committee, headed by Deveraux C. Josephs, Chairman of the Board of the New York Life Insurance Company, showed a generally more conservative

approach in assessing the Federal role than did the Zook Commission. As a result, its recommendations were on the whole less sweeping, and perhaps more attainable.

However, the Committee's evaluation of its own role attest to a continuing perception of the role of the Federal Government as being one of continuing support for higher education, as a permanent part of American life, rather than an agency to turn to in times of crises as they arose. The Committee said of its role:

In the light of the serious national and international problems that require the United States to be educated to its full capacity, the occasional appointment of temporary committees is inadequate to deal with the needs for national leadership and coordinated Federal activity in the field of post-high school education. The Committee believes that in addition to those permanent and temporary committees now operating, permanent machinery should be created, . . . to keep under continuous scrutiny all Federal programs affecting education beyond the high school and to advise the President and the heads of appropriate agencies thereto.<sup>26</sup>

The Committee compared the needs of higher education to the needs of industries of national scope for which efficient federal services are required. The Committee again observed the lack of a comprehensive policy, and especially the lack of a systematic information service:

Post high school education is local in effect and national in consequences. In this respect it does not differ from agriculture or commerce and industry. The farmers and business men are much better served by their government, nor would they tolerate the deficiencies in information and planning assistance that are experienced by the educational community--which includes all citizens: educators, students, parents and employers.<sup>27</sup>

The Committee suggested that the system of post-secondary education was ill equipped to meet the growing pressure. The Committee referred to an increase in the demand for education:

First the impact of the greatly increased birth rates of the past 15 years will shortly involve institutions beyond the high school. They are already at the highest enrollment peak in history because of growing proportions of the population seeking education beyond the high school.

Second there are rapidly increasing demands throughout our expanding economy for men and women with education and training beyond the high school.<sup>28</sup>

The Committee envisioned a much more modest role for the Federal Government than the Zook Commission, although the Committee recognized the efforts of several Federal agencies and expressed concern that the various programs be coordinated. On the role of the Federal Government the Committee recommended:

The Committee believes that the role of the Federal Government in higher education should be definitely residual. Certainly the Federal Government should in no way assume powers of control, but it nevertheless has important obligations and responsibilities in this area.

Over the past 100 years many Federal programs have evolved . . . There is little evidence that any of these has led to undue Federal interference. But there is a striking lack of coordination and consistency among them. These numerous activities are authorized by a wide variety of separate pieces of legislation and their administration is scattered across many separate Federal agencies with no mechanism for effective coordination or even for taking inventory.<sup>29</sup>

The Committee recommended a role for the two-year colleges to meet the demands for increased higher education

capacity, and correctly perceived that while meeting the demands of increased enrollment the two-year colleges would accelerate enrollments. The Committee recommended:

Communities or groups of communities faced with an impending shortage of higher education capacity will do well to consider the new two-year colleges as part of the solution. . . .

New community colleges, however, should not be viewed as a panacea for relieving pressures upon existing four-year institutions. On the contrary, they are bound to accelerate the overall increase in enrollments, the demand for teachers and the need for funds.<sup>30</sup>

#### Reaction to the Committee's Proposals

No coordinating body, as the Committee recommended was established. However, the National Defense Education Act was passed the following year. The Act included provisions for securing information concerning all specialized scholarships, fellowships and educational programs administered under any department or agency of the Federal Government.

Many of the recommendations of this Committee, and of the earlier Zook Commission were carried out in the immediate following years. Much of the success may be attributed to external factors, which happened quite apart from the Report of the Committee. Within six months after the Committee's Report the first Russian satellite, Sputnik, went into orbit and American higher education became a matter of national concern. Support of Federal programs



was suddenly thrust forward, and the Committee's Report provided some direction for those efforts.

President's Task Force on Higher Education (1970)

The President's Task Force clearly outlines what it proposes as priorities for the present and the future in higher education. President Nixon appointed a Task Force on Higher Education and asked for a statement on priorities for higher education, and further requested that the Task Force suggest ways in which the Federal Government might assist in achieving those priorities. The question of whether the Federal Government is to have a role has largely been settled as most policy groups currently consider mainly how rather than whether. The Task Force indicated the fundamental assumptions which they share; outlined priorities and made recommendations. The assumptions, in part, are given below:

1. . . . only through higher education can individuals fulfill many of their personal aspirations, and only through higher education can the nation achieve many of its fundamental national goals--intellectual, cultural, scientific, and economic. Among the first priorities for a government concerned with individual and national development must be a preservation and strengthening of this prime national asset.
2. . . . existing American institutional patterns for education beyond the high school do not provide sufficient quantity and variety of educational opportunities for the quantity and variety of persons in our society needing and expecting such education.<sup>31</sup>

Based on their assumptions and recommendations the Task Force determined immediate Federal priorities, continuing priorities and institutional priorities, as are listed below:

The following are, in our opinion, the most immediate Federal priorities:

- I. Financial Aid for Disadvantaged Students.
- II. Support of Health Care Professional Education.
- III. Increased Tax Incentives for Support of Higher Education.

We believe the following are continuing Federal priorities:

- I. The Expansion of Opportunities for Post-High-School Education.
- II. The Support of High Quality Graduate and Professional Education.

We believe four areas constitute the highest institutional priorities for our colleges and universities:

- I. Clarification of Institutional Purposes.
- II. Improvement of the Quality of the Curriculum and Method of Teaching.
- III. More Efficient Use of Resources.
- IV. Clarification of Institutional Governance.<sup>32</sup>

Although the Task Force advocated extension of educational opportunity, the report went on to emphasize that not all individuals should be encouraged to seek the same post-high-school educational goals. The Task Force urged provision of a variety of programs and opposition to pressures that encourage the pursuit of status rather of substance. A clear role was proposed for the system of community colleges. The Task Force recommended in regard to community colleges:

We believe the expansion of post-secondary education should take place largely in the two-year colleges and equivalent programs that combine a variety of educational and occupational options. These two year colleges should accept the major responsibility for increasing access to post high school education and also for offering remedial and compensatory education.<sup>33</sup> Many of these should be located in urban centers.

The responsibility of the Federal Government was also spelled out:

**Aid to student:** The major program of financial aid to economically disadvantaged students as an Immediate Federal Priority must be continued for many years to come. In addition we urge the establishment of a national loan fund to enable other students to spread the cost of education over a period of time.

**Support for Two-Year Colleges:** Where local funds are inadequate, federal funds should be made available to public and private organizations to create and expand two-year institutions which serve the comprehensive purposes described above. Such support should also be made available to four year institutions that offer comprehensive two-year programs. In addition, where local funds are inadequate, special federal programs should provide funds to support operating costs. . . .<sup>34</sup>

### The Proposals of Non-Government Commissions

#### The Educational Policies Commission

The Education Policies Commission published Universal Opportunity for Education Beyond the High School, in 1964, in which the Commission reaffirmed the basic goals of the Zook Commission on Higher Education of 1947. The Commission proposed:

Each state . . . should develop a plan for expansion of its entire system of higher education . . . expanding universal opportunities in general education

for at least two years beyond the high school. Federal funds should be appropriated in support of these state plans.<sup>35</sup>

The Commission concluded that there are both idealistic and practical reasons for insuring that persons have an opportunity to achieve the mental development that will free their minds. The Commission said:

A man is free, then, in the degree to which he has a rational grasp of himself, his surroundings, and the relations between himself and his surroundings. The main restrictions to freedom are prejudice and ignorance . . . The rational dimension has always been an integral part of the ideal of freedom. But today . . . the ideal is increasingly a practical necessity for both individual and society.

The ability to keep a job in a rapidly developing technology or make the decisions required of responsible citizenship and parenthood increasingly requires an advanced command of rational processes.<sup>36</sup>

Therefore the Commission reaffirmed a public policy to promote universalization of educational opportunity beyond the high school.

As the Commission wrote the Nation continued to move in extending educational achievement. The portion of the age group graduating from high school was increasing at an annual rate of 1.5 percent; and the portion of high school graduates enrolling beyond the high school had been increasing at an annual rate of 1 percent. In 1963 about 58 percent of high school graduates enrolled for degree credit. The Educational Policies Commission concluded that such enrollment increases were in the public interest:

The clear requirement is for a public policy that the thirteenth and fourteenth years of education

in public colleges be free of cost to the student, because it is in the interest of the nation.<sup>37</sup>

The Commission, noting that universal education has always meant public education, advocated that the major share of the increase in cost of increased enrollments beyond the high school should come from the Federal Government. The Commission, indicating cognizance of a feeling that the individuals who benefited should pay for the privilege of their education either immediately or through a loan plan, unequivocally asserted that society as a whole gained more benefits than it incurred costs in the support of higher education:

This additional education serves not only the individual but society in general. . . . Moreover a person who earned more income also pays more tax, and a proportionately greater share as his income rises. In other words, most people whose incomes rise as a result of advanced education do pay the cost of that education in higher taxes. The Veterans Administration has suggested that the G. I. Bill of Rights . . . ended up costing the people nothing; the beneficiaries have paid back in increasing taxes more than they received in benefits.<sup>38</sup>

#### The Carnegie Commission: Open Door Colleges

The Carnegie Commission, noting the inequality of educational opportunity, recommended federal financial support and at the same time advocated autonomy for community colleges in their decision making. The Commission said, in regard to inequality of opportunity and need:

The need for financial support for community colleges is critical. . . . Furthermore, the development of community colleges has lagged

in low-income states and in some of the states with sparse populations, or no provisions for state financial support of community colleges.<sup>39</sup>

Open Door Colleges continued and identified specific areas of need which should be underwritten by the Federal Government:

The Commission recommends that the federal government assist community colleges by providing (1) funds for state planning; (2) start-up grants for new campuses; (3) construction funds; (4) cost-of-education allowances for low-income students attending the colleges; (5) grants, work-study opportunities, and loans for the colleges; and (6) an expanded program of federal training grants to stimulate expansion and improvement of graduate education programs for community college teachers, counselors and administrators--all as recommended in its report on federal aid as revised in June, 1970.<sup>40</sup>

But while recommending Federal aid, the Commission clearly argued for a system which would retain local autonomy for the community colleges:

In general the federal governments role should be confined to the provision of limited financial support, as recommended above, including the stimulation of planning by the states through planning grants. The states should undertake the responsibility for the development of state plans, adequate financial support, and a set of general state criteria and standards for the community colleges. However, within a framework of state planning and guidance, local community college districts should have the responsibility for detailed policy decisions in their districts.<sup>41</sup>

#### Interest in a Comprehensive Policy, the Educational Commission of the States

The Educational Commission of the States was formed as a result of grants through the Carnegie and Danforth

Foundation. Political and educational leaders of several states joined together in an effort to support public policy toward education which would best serve the Nation. Leaders and interest groups from local and state levels were brought together at a national level in an attempt to solve problems which prevailed across political jurisdictions, and obtain out of the myriad of interests, as the name would suggest, one nationwide policy. This repeats a need identified in every President's commission or committee or task force on higher education.

#### The American Council on Education

In 1967, in The Federal Investment in Higher Education: The Need for a Sustained Commitment, the American Council on Education stressed the need for a federal commitment, gave a note of caution of uneven and unsustained support and recommended that support of institutions be increased, especially as the institutions sustained increased financial burdens with increased enrollments. Part of the increased enrollments were attributed to Federal support of students and thus, the Council felt that institutions should be supported accordingly if quality was to be maintained. The Council wrote:

. . . each program contributes to the strengthening of our colleges and universities. The strengthening has, however, been uneven. Many institutions with a potential for making major contributions to young people . . . have virtually been by-passed. Even in strong universities imbalances have been created. . . .

We recommend that the next major step forward in the federal effort to strengthen higher education by the support of institutions as institutions.<sup>42</sup>

The Council repeated the position in 1969 in Federal Programs for Higher Education. And again in 1971 the Council encouraged more Federal support and urged especially institutional support. The Council stressed the financial burdens for institutions were increasing by Federal support of students who in turn were not paying the full cost of the programs in which they enrolled, encouraged by federal financial support. The Council expressed its position:

In his 1970 higher education message to the Congress, President Nixon stated as a national goal that "no qualified student who wants to go to college should be barred by lack of money." The Council supports this goal wholeheartedly. . . .

The president has proposed to expand federal assistance and direct it to the least affluent in our society. If his program succeeds, he expects that over the next four years a million students who would not otherwise have done so will present themselves to institutions of higher learning. . . .

If the government adds to those strains by providing aid only to students, the predictable result will be disappointment or lowered quality for hundreds of thousands of young people.<sup>43</sup>

U. S. Department of Health, Education and Welfare,  
Office of Education

The Office of Education in 1971, in Report on Higher Education, published a report which also encouraged increased federal support, and flexibility such as was not available in categorical grants. The Office recommended:



We also recommend that both the state and federal governments provide funds to the institutions (both public and private) in the form of grants that accompany certain categories of students. All institutions need some flexible funding, some means of responding to new ideas or differing circumstances. . . .

Providing funding through grants accompanying students . . . has the advantage of encouraging a sense of competition and a willingness to change as society changes. . . .

The trend toward centralization and bureaucracy became evident during the 1960s, when state and federal funding grew at the greatest rate ever. We believe that the time to reverse the present trend toward centralization is now or the chance will be lost for a long time.<sup>44</sup>

### The Federal Role Defined in Legislation in Support of Higher Education

#### The NDEA, a Turning Point in Public Policy

Alice Rivlin, in 1961, identified the National Defense Education Act (1958) as a major turning point in American public policy concerning post-secondary education. Rivlin marks the Act as an explicit shift to general and continuing aid. She writes:

The National Defense Education Act may represent the beginning of a new era of explicit recognition of higher education as a legitimate area of federal concern. To be sure . . . there is considerable verbiage about "national security". . . . Nevertheless the Act comes close to being an out-and-out education measure than any previous legislation. The provision for the student loan program seems to indicate congressional acceptance of the idea that it is in the national interest for the federal government to help undergraduates finance their education on a continuing basis. . . . The efficacy of the measure may be questioned, but the intent if the National Defense Education Act clearly was to use Federal resources to strengthen higher education generally. This recognition of

higher education as a national concern may well turn out to be the most important feature of the Act.<sup>45</sup>

That was a distinct change in explicit Federal policy. The Act clearly defines it to be a national interest that every person be educated to the limit of his potential. And education in general, or in many areas, is supported rather than programs of support for explicit programs aimed at specific manpower needs. Babbidge and Rosenzweig agreed with Rivlin, as they wrote of the shift in policy:

Even accepting the term "national defense" at its face value, this statement stands as a firm declaration of a broad principle that is at least 90 degrees and closer to 180 degrees from previous Government policy. One of America's great social contributions has been a workable system of public education open to all citizens. Under State authority this system has been carried forward by means of State colleges and universities. But the Congress of the United States had never before declared it to be a goal of national policy that "no student of ability will be denied an opportunity for higher education because of financial need."<sup>46</sup>

The National Defense Education Act represented a major shift in the Government's attitude toward student financial assistance. The Act represents the first major step toward the positive position that the national well-being requires that every individual have an opportunity for the most advanced training of which he is capable. Although the specific terms of the Act fall short of its philosophical commitment, it is of interest here. Title I of the Act is devoted to a declaration of policy. It states, in part:

The Congress hereby finds and declares that the security of the Nation requires the fullest development of the mental resources and technical skills of its young men and women. The present emergency demands that additional and more adequate educational opportunities be made available.

We must increase our efforts to identify and educate more of the talent of our Nation. This requires programs which will give assurance that no student of ability will be denied an opportunity for higher education because of financial need. . . .

To meet the present educational emergency requires additional effort at all levels of government. It is therefore the purpose of this Act to provide substantial assistance in various forms to individuals and to States and their subdivisions, in order to insure trained manpower of sufficient quality and quantity to meet the national defense needs of the United States.<sup>47</sup>

#### The Higher Education Facilities Act

At the beginning of the decade of the 1960s the condition of inadequate facilities of higher education was brought to the attention of the Congress. President Kennedy had frequently urged upon Congress the necessity of Federal aid for higher education. In one of his Messages to Congress, on February 20, 1961 (one month after inauguration), he stated:

The national interest requires an educational system on the college level sufficiently financed and equipped to provide every student with adequate physical facilities to meet his instructional, research and residential needs.<sup>48</sup>

The Eighty-seventh and Eighty-eighth Congress held a long series of hearings and as a result passed Public Law 88-204, the Higher Education Facilities Act of 1963. The Act provided for both grants and loans to be made available at both the undergraduate and graduate level. The Act was

narrower than some critics would have desired, as the grants and loans were made available only for designated academic facilities and for the purposes given in the Act.

The development of another aspect of Federal policy at the post-secondary level was becoming apparent. The Act provided assistance to both public and nonpublic institutions. There were prohibitions against the use of such funds for sectarian instruction or religious worship, but aid for education purposes to private institutions became a precedent.

There were also equalization provisions in the funding formula, at least partially adjusting for differences in personal income. The share for each state was determined, in part, by the ratio of the states personal income to that of the mean per capita income for the fifty states.

The Act was established to be administered by the U. S. Office of Education. The Office was prohibited, by provisions of the Act, from exercising any control over curriculum or methods of instruction.

M. M. Chambers makes two points of criticism which bear on the development of public policy. He reiterates the criticism of specific, categorical grants and notes the skewness which favors certain portions of the curriculum. He writes:

The restriction to buildings for a specific purpose is rather unrealistic and a trifle absurd--a fruit of the excitement of "Sputnik" and the international arms race. Few college buildings are used for

precisely the same purposes throughout their useful lives, as the institution grows and the older buildings become obsolete as new ones are added. . . .

In the realm of academic facilities, the attempt to skew the nationwide picture in favor of facilities for mathematics, engineering, science, and modern foreign languages is an unnecessary encroachment upon the control of the institutions and a disturber of their morale. . . .<sup>49</sup>

The author continues and notes that the skewing in favor of certain disciplines occurred in the early years of the National Defense Education Act, and was a prominent feature of research grants from Federal agencies such as the Atomic Energy Commission, the Department of Defense, and the National Aeronautics and Space Administration.

Experience, however, directed Federal policy to broader and more general support of post-secondary education. Under the NDEA Congress later determined that reading, writing and other skills necessary to the national interest were lacking. The NDEA was extended to support history, civics, geography, English, economics and industrial arts. Also in following years other acts were passed adding to the comprehensiveness of Federal support.

#### Vocational Education Act of 1963

President Kennedy directed the Secretary of Health, Education, and Welfare to convene an advisory body drawn from the education profession, labor, industry, and agriculture, as well as the lay public. The Panel recommended that the local-state-Federal partnership increase

support for (1) high school students preparing to enter the labor market or become homemakers; (2) youth with special needs who have academic, socioeconomic, or other handicaps that can prevent them from succeeding the usual high school program; (3) youth or adults who have completed or left high school; (4) youth and adults who need training or retraining to achieve employment stability; and (5) adequate services to assure quality in all vocational and technical programs.<sup>50</sup>

The result of the subsequent legislation redirected vocational education programs from preparation for specific occupations to any occupation not requiring a baccalaureate degree. And special emphasis was placed on programs to help groups of people with specific needs, rather than programs directed at supplying skills and manpower needs for specific occupations or industries.

Five years later (1968) the Vocational Amendments of 1968 merged all programs into one act. And most important for policy, the Act replaced occupational oriented categories with categories of people, with programs aimed at the needs of those groups of people.

#### Higher Education Act

The Higher Education Act of 1965 was a very comprehensive act. A list of the Titles indicates the breadth of the legislation and the comprehensiveness of the Act. The Titles include: Community Services; Library Assistance; Library Training and Research; Strengthening Developing

Institutions; Student Assistance (opportunity grants, loans, work study programs); Teacher Programs (National Teachers Corp, fellowships); Financial Assistance for the Improvement of Undergraduate Instruction; as well as other provisions.

The effect of this and other legislation is indicated by Wolk:

The Higher Education Act of 1965 provided for Economic Opportunity Grants to needy students--the first general program of federal scholarships to undergraduates. The Economic Opportunities Act, the Civil Rights Act, and the Guaranteed Student Loan Program have moved to lower the financial barriers which had kept many needy people out of college.<sup>51</sup>

The aims of this Act, with those of other legislation, were incorporated into the Higher Education Amendments of 1968. The acceptance of Federal responsibility to extending opportunity is clearly indicated in Title V of the Higher Education Amendments, which requires the President to submit to the Congress proposals relative to the feasibility of making available post-secondary education to all persons who are willing and able to benefit.

Indeed, Rivlin's observation of a turning point were borne out by events of the sixties, which have been identified as a "Growing Federal Presence":

To turn to the federal level, perhaps the best way to describe the situation is in terms of the growing federal presence. In the decade of the 60's, actually beginning with the National Education Defense Act of 1958, more postsecondary and higher education legislation was enacted than in the entire previous history of the country. While the main focus of most of the legislation of the

60's tended to be on the baccalaureate, professional and graduate education, the community colleges were not overlooked. They received possible or actual support under a series of acts including the Manpower Development and Training Act of 1963, the Higher Education Facilities Act of 1963, the Vocational Education Act of 1963, the National Education Amendments of 1964, the Higher Education Act of 1965, the Vocational Amendments of 1968, the Education Professions Development Act of 1968, and a series of health education acts. . . .

And yet all of these tend to fall into the background in relation to the potential impact, if funded, of the Education Amendments of 1972. The current amendments constitute a whole new ball game and underline as never before the necessity for a real institutional-state-federal partnership if the intents of the Act are in fact to lead to a revitalized postsecondary educational system in the country.<sup>52</sup>

Some of the provisions of the Education Amendments of 1972 are of special interest in considering the development of public policy. Among its aims the Act makes provisions in financial assistance which would, as expressed in the Act, move in the direction of insuring educational opportunity for all students by removing racial and cultural barriers and providing aid for the economically disadvantaged. The Act makes claim to general support of post-secondary education. The Federal Government places itself as an agent of change. And in regard to community colleges, Title X specifically provides for their support, their development and their expansion.

#### The Administration's Program (1970)

President Nixon's Message to the Congress on Higher Education, March, 1970, had as its intent progress toward



universal opportunity. And while there is current controversy over the actual effect of budget decisions and Federal appropriation, the principles in the Message are clear. The issue of universal education is relevant, especially, to two groups: young persons from poor families and young persons whose natural endowment or cultural development is such that traditional forms of education available to them are ineffective. The President's Message was clear to these groups:

No qualified student who wants to go to college should be barred by lack of money. That has long been a great American goal: I propose that we achieve it now.

Something is basically unequal about opportunity for higher education when a young person whose family earns more than \$15,000 a year is nine times more likely to attend college than a young person whose family earns less than \$3,000.

Something is basically wrong with Federal policy toward Higher Education when it has failed to correct this inequity, and when Government programs spending \$5.3 billion have largely been disjointed, illdirected and without a coherent long-range plan.

Something is wrong with our higher education policy when-on the threshold of a decade in which enrollments will increase almost 50%-not nearly enough attention is focused on the 2-year community colleges so important to the careers of so many young people.<sup>53</sup>

The President continued, and reaffirmed proposals that Federal aid shift from categorical aid to aid of a general nature.

For three decades now the Federal Government has been hiring universities to do the work it wanted done. In far the greatest measure, this

work has been in the national interest . . . .  
 But the time has come for the Federal Government to help academic communities to pursue excellence and reform in fields of their own choice.<sup>54</sup>

And to secure coherence in policy, and comprehensive planning for a system of higher education, a goal often posed by policy makers in higher education, the President proposed the National Foundation for Higher Education. That agency was to be independent of the Federal Government but chartered by it.

#### Congressional Intent in Extending Equality of Opportunity

The manner of funding, at least at the community college level, has clearly shifted from narrow categorical funding to broad funding of institutions and funding of students, through institutions, with provision for a wide range of individual choice of program. This change coincides with a change in the perception of the Nation's interest in Federal aid. The language of the legislation involved refers less to specific national interests and more frequently to demands of the economy and demands of social justice for an increase in higher education across the population as a whole. The incorporation of programs in the Higher Education Amendments of 1968 and of 1972 indicates an interest in securing a comprehensive Federal program. Such programs as Talent Search and Upward Bound indicate an intent to extend opportunity to persons who

would otherwise not secure further education. That interest is specifically expressed in the last Title of the Educational Amendments of 1968:

Sec. 508. On or before December 31, 1969, the President shall submit to the Congress proposals relative to the feasibility of making available a post-secondary education to all young Americans who qualify and seek it.<sup>55</sup>

The intent of Congress was further clarified in the Higher Education Amendments of 1972. Among its many provision the Act states support of universal accessibility and the role of the community colleges in accessibility. Among other things, Title X states:

Sec. 1001. (a) Each State Commission (established or designated under section 1202) of each State which desires to receive assistance under this subpart shall develop a statewide plan for the expansion or improvement of postsecondary education programs in community colleges or both. Such plan shall among other things--

(1) designate areas, if any, of the State in which residents do not have access to at least two years of tuition-free or low-tuition postsecondary education within reasonable distance;

(2) set forth a comprehensive statewide plan for the establishment, or expansion, and improvement of community colleges, or both, which would achieve the goal of making available, to all residents of the State an opportunity to attend a community college (as defined in section 1018);

(3) establish priorities for the use of Federal and non-Federal financial and other resources which would be necessary to achieve the goal set forth in clause (2).<sup>56</sup>

Although controversy subsequently arose over the establishment of the 1202 commissions, the intent to increase the accessibility of higher education is clear, at least through the community college level.

The intent to encourage comprehensive Federal support is implied in the Higher Education Amendments of 1972, which established an independent agency within the executive branch which was to conduct a study and then be terminated. The objectives of the National Commission on the Financing of Postsecondary Education are given in Title VI:

Sec. 140. (a) (1) It is the purpose of this section to authorize a study of the impact of past, present, and anticipated private, local, State, and Federal support for postsecondary education, the appropriate role for the States in support of higher education (including the application of State law upon postsecondary educational opportunities), alternative student assistance programs, and the potential Federal, State, and private participation in such programs.

(2) In order to give the States and the Nation the information needed to assess the dimensions of, and extent of, the financial crisis confronting the Nation's postsecondary institutions such study shall determine the need, the desirability, the form, and the level of additional governmental and private assistance. Such study shall include at least (A) an analysis of the existing programs of aid to institutions of higher education, various alternative proposals presented to the Congress to provide assistance to institutions of higher education, as well as other viable alternatives which, in the judgment of the Commission, merit inclusion in such a study; (B) the costs, advantages and disadvantages, and the extent to which each proposal would preserve the diversity and independence of such institutions; and (C) the extent to which each would advance the national goal of making postsecondary education accessible to all individuals including returning veterans, having the desire and ability to continue their education.<sup>57</sup>

Paragraph (C) in the Section above clearly states the national goal of making post-secondary education accessible to all individuals who have the desire and ability to continue their education.

### Summary Observation

Thomas Jefferson identified the public interest in supporting higher education as providing those parts, not normally provided by private higher education, necessary to complete the circle. And while he thought those areas to be only certain sciences, Jefferson felt that they were necessary to the well-being of the Nation. Such education was restricted to a limited portion of the population which either trained for a profession or was educated to provide leadership.

The purposes for which the Federal Government supported higher education increased as the Nation developed. As Commager noted, education became the religion of the early Nation. Education was expected to meet an immense variety of needs. The first experience of Federal support for higher education was incidental to other problems and provided categorically. Higher education was supported in the interest of making agriculture more scientific, alleviating depressions and providing the manpower skills and research and development which were necessary to the Nation's war effort. Nonetheless higher education enrollment increased.

President Truman's Commission on Higher Education identified higher education as an investment in social welfare, better living standards, better health and less crime. In fact the Commission declared that the advances of technology and the demands of the political and social

systems required free public higher education through grade fourteen, as was provided at the high school level.

Legislation, beginning with the National Defense Education Act, identified an interest in developing the capacity of individuals as a National resource, rather than providing education incidentally to meet manpower and skill needs for specific problems. Thus individuals were supported in educational programs of their own choice. And while the curricula supported in the original legislation were limited, subsequent legislation provided support for an increasing variety of curricula.

Along with the increase in diversity of support there developed an increasing demand for equality of opportunity. Legislation in civil rights and support programs for higher education specifically stated an intent to increase equality of opportunity and prevent discrimination. President Nixon stated that no qualified student who wants to go to college should be barred by lack of money. (See Note number 53.) That policy which was also stated by President Truman has since that time been supported with varying amounts of financial support. But generally the public support and subsequent financial support have been increasing. And while the current public statements and legislative intent do not support universal higher education, there is support for extending equality of opportunity for higher education, and for increasing the range and variety of curricula.

## NOTES

1. Homer D. Babbidge and Robert M. Rosenzweig, The Federal Interest in Higher Education (New York: McGraw-Hill Book Co., 1962), p. 3.

2. Ibid., p. 4.

3. Ibid., p. 5.

4. Ibid., p. 7.

5. Henry Steele Commager, "Social, Political, Economic and Personal Consequences," Universal Higher Education, Ed. Earl J. McGrath (New York: McGraw-Hill Book Co., 1966), pp. 4-6.

6. Ibid., p. 16.

7. Babbidge and Rosenzweig, p. 9.

8. M. M. Chambers, Higher Education: Who Pays? Who Gains? (Danville, Illinois: The Interstate Printers & Publishers, Inc., 1968), p. 233.

9. Ibid., p. 233.

10. Richard G. Axt, The Federal Government and Financing Higher Education (New York: Columbia University Press, 1952), p. 81.

11. Ibid., p. 81.

12. Babbidge and Rosenzweig, p. 15.

13. Alice Rivlin, The Role of the Federal Government in Financing Higher Education (Washington, D. C.: The Brookings Institution, 1961), pp. 118-119.

14. Babbidge and Rosenzweig, pp. 83-84.

15. Axt, p. 190.

16. President's Commission on Higher Education, Higher Education for American Democracy, Vol. V. Financing Higher Education (Washington, D. C.: U. S. Government Printing Office, 1947), p. 3.

17. President's Commission on Higher Education, Higher Education for American Democracy, Vol. II. Equalizing and Expanding Individual Opportunity (Washington, D. C.: U. S. Government Printing Office, 1947), p. 23.

18. President's Commission on Higher Education, Higher Education for American Democracy, Vol. I. Establishing the Goals (Washington, D. C.: U. S. Government Printing Office, 1947), p. 54.

19. President's Commission on Higher Education, Vol. V., pp. 5-6.

20. President's Commission on Higher Education, Vol. V., p. 38.

21. President's Commission on Higher Education, Vol. II., p. 69.

22. Axt, pp. 211-212.

23. Babbidge and Rosenzweig, p. 80.

24. Warren Willingham, Universal Access to Higher Education (San Francisco: Jossey-Bass, 1971), p. 16.

25. Babbidge and Rosenzweig, p. 80.

26. The President's Committee on Education Beyond the High School, Second Report to the President (Washington, D. C.: U. S. Government Printing Office, 1957), p. 25.

27. Ibid., p. 15.

28. Ibid., p. ix.

29. Ibid., p. 15.

30. Ibid., p. 12.

31. President's Task Force on Higher Education, Priorities in Higher Education (Washington, D. C.: U. S. Government Printing Office, 1970), p. 2.

32. Ibid., Introduction

33. Ibid., p. 9.

34. Ibid., pp. 10-11.

35. Education Policies Commission, Universal Opportunity for Education Beyond the High School (Washington, D. C.: National Education Association, 1964), p. 33.



36. Ibid., pp. 1-2.
37. Ibid., p. 27.
38. Ibid., p. 27.
39. The Carnegie Commission on Higher Education, Open Door Colleges (Highstown, N. J.: McGraw Hill Book Co., 1970), p. 41.
40. Ibid., p. 44.
41. Ibid., p. 47.
42. The Carnegie Commission on Higher Education, Institutional Aid (New York: McGraw Hill Book Co., 1972), pp. 107-108.
43. Ibid., pp. 133-134.
44. Ibid., p. 128.
45. Rivlin, p. 119.
46. Babbidge and Rosenzweig, p. 51.
47. Ibid., p. 50.
48. Lu Hsien, Federal Role in Education (New York: American Press Publications, Inc., 1965), p. 190.
49. Chambers, p. 238.
50. Edgar Hugh Bedenbaugh, Extent of Financial Equalization Among the States from Ten Programs of Federal Aid to Education (Dissertation, University of Florida, Gainesville, Florida, 1970), p. 64.
51. Ronald A. Wolk, Alternative Methods of Federal Funding for Higher Education (Berkeley, Calif.: Carnegie Commission on Higher Education, 1968), p. 3.
52. Richard M. Millard, "The Necessity of Coordinating State and Federal Support for Community Colleges," Agenda for National Action (Washington, D. C.: American Association of Community and Junior Colleges, 1972), p. 120.
53. Daniel P. Moynihan, "On Universal Higher Education," Higher Education for Everybody? Ed. W. Todd Furniss (Washington, D. C.: American Council on Education, 1971), p. 243.
54. Ibid., p. 248.

55. United States, Statutes at Large, Vol. LXXXII, p. 1012.

56. United States, Public Law 92-318, Education Amendments of 1972 (Washington, D. C.: Government Printing Office, 1972), p. 77.

57. Ibid., p. 47.

### CHAPTER III

#### LEGISLATIVE INTENT AND PROVISION OF THE SELECTED AID PROGRAMS

There are many issues in the enactment of legislation for Federal aid to education. There is the question of whether to provide aid; and if so in what amount and under what conditions. Each program, as well as providing for aid to education, addresses other questions. There may be unexpected and unintended effects. The purpose of this chapter is to provide basic information concerning the legislative intent of the programs under consideration.

#### Manpower Development and Training Act-- Public Law 87-415

Congress determined that there was a need for more and better trained personnel in many vital occupation areas, that there were persons unemployed and underemployed for lack of adequate and appropriate training and that dislocation in the economy due to technological change caused persons to be displaced and to have obsolete skills. Therefore Congress, on March 15, 1962, passed the Manpower Development and Training Act. The Department of Labor and the Department of Health, Education and Welfare were both given responsibilities. In the Department of Labor a

specific office was established. The Office of Manpower, Automation and Training was set up in 1962 for this purpose.

The Statement of Findings and Purpose of the Act again clearly defined a national interest and stated: "It is in the national interest that current and prospective manpower shortages be identified and that persons who can be qualified for these positions through education and training be sought out and trained in order that the Nation may meet the staffing requirements of the struggle for freedom."<sup>1</sup> The national need is further defined in Title I of the Act.

Manpower Development and Training Act, Title I--  
Manpower Requirements and Utilization

The interest of the Nation, the problem involved and the intent of the Act are made clear in the Statement of Findings and Purpose of the Act. The Statement is given below:

Sec. 101. The Congress finds that there is critical need for more and better trained personnel in many vital occupational categories, including professional, scientific, technical, and apprenticeable categories; that even in periods of high unemployment, many employment opportunities remain unfilled because of the shortages of qualified personnel; and that it is in the national interest that current and prospective manpower shortages be identified and that persons who can be qualified for these positions through education and training be sought out and trained, in order that the Nation may meet the staffing requirements of the struggle for freedom. The Congress

further finds that the skills of many persons have been rendered obsolete by dislocations in the economy arising from automation or other technological developments, foreign competition, relocation of industry, shifts in market demands, and other changes in the structure of the economy; that Government leadership is necessary to insure that the benefits of automation do not become burdens of widespread unemployment; that the problem of assuring sufficient employment opportunities will be compounded by the extraordinarily rapid growth of the labor force in the next decade, particularly by the entrance of young people into the labor force, that improved planning and expanded efforts will be required to assure that men, women, and young people will be trained and available to meet shifting employment needs; that many persons now unemployed or underemployed, in order to become qualified for reemployment or full employment must be assisted in providing themselves with skills which are or will be in demand in the labor market; that the skills of many persons now employed are inadequate to enable them to make their maximum contribution to the Nation's economy; and that it is in the national interest that the opportunity to acquire new skills be afforded to these people in order to alleviate the hardships of unemployment, reduce the costs of unemployment compensation and public assistance, and to increase the Nation's productivity and its capacity to meet the requirements of the space age. It is therefore the purpose of this Act to require the Federal Government to appraise the manpower requirements and resources of the Nation, and to develop and apply the information and methods needed to deal with the problems of unemployment resulting from automation and technological changes and other types of persistent unemployment.<sup>2</sup>

The following sections of Article I specifically required appraisal of the manpower requirements of the Nation. Section 102 required the Secretary of Labor to evaluate the impact of, and benefits and problems created by automation and technological progress. The Secretary was required by the Act to study factors which affect the mobility of labor, methods of promoting effective

utilization, and methods of providing work experience and training opportunities. The Act further specified that the Secretary of Labor is to make such reports and recommendations to the President as he deems appropriate pertaining to manpower requirements, resources and training; and that the President shall transmit to the Congress within sixty days after the beginning of each regular session a report pertaining to manpower requirements, resources, utilization and training.

Manpower Development and Training Act, Title II--  
Training and Skill Development Programs

While Title I provided for evaluation of needs, Title II specified responsibility for developing programs and providing allowances to persons selected under this Act. General responsibility was specified in the Act:

Sec. 201. In carrying out the purposes of this Act, the Secretary of Labor shall determine the skill requirements of the economy, develop policies for the adequate occupational development and maximum utilization of the skills of the Nation's workers, promote and encourage the development of broad and diversified training programs, including on-the-job training, designed to qualify for employment the many persons who cannot reasonably be expected to secure full-time employment without such training, and to equip the Nation's workers with the new and improved skills that are or will be required.<sup>3</sup>

The Secretary of Labor was charged in the Act with providing a program for testing, counseling and selection for training persons who could not reasonably be expected to secure appropriate full-time employment without such training. Priority was given first to the unemployed and

then to others who could benefit. Also priority was given for programs that would lead to employment within the market area. Only cases in which training could reasonably be expected to lead to employment were to be approved.

The Secretary of Labor was authorized to enter into contracts with the States to reimburse them for payments under provision of the Act. Payments to each individual were set to not exceed fifty-two weeks and not to exceed the average weekly unemployment compensation in that State (except that if an individual were eligible for unemployment compensation which would exceed that amount payment to that individual could be increased to the amount of the unemployment compensation for which he would be eligible). Later amendments increased that limit by \$10.00 per week. In addition subsistence allowances were set for those who would be forced by the training to reside or commute from their homes.

The main intent was addressed to those who had been employed for at least three years. But provisions were added for training persons nineteen through twenty-two years old for whom such training would be necessary to secure appropriate employment.

The Secretary was charged in the Act with appointing a National Advisory Committee. The Committee was to assist in the organization of labor-management-public committees designed to further the purposes of the Act.

Part B of Title II specifies the responsibility of the Secretary of Health, Education and Welfare.

Sec. 231. The Secretary of Health, Education, and Welfare shall, pursuant to the provisions of this title, enter into agreements with States under which the appropriate State vocational education agencies will undertake to provide training needed to equip persons referred to the Secretary of Health, Education, and Welfare by the Secretary of Labor pursuant to section 202, for the occupations specified in the referrals. Such State agencies shall provide for such training through public education agencies or institutions or, if facilities or services of such agencies or institutions are not adequate for the purpose, through arrangements with private educational or training institutions. The State agency shall be paid 50 per centum of the cost to the State of carrying out the agreement, except that for the period ending June 30, 1964 the State agency shall be paid 100 per centum of the cost of the State of carrying out the agreement with respect to unemployed persons. Such agreements shall contain such other provisions as will promote effective administration (including provision (1) for reports on the attendance and performance of trainees, (2) for immediate certification to the Secretary of Labor by the responsible training agency with respect to each person referred for training who does not have a satisfactory attendance record or is not making satisfactory progress in such training absent good cause, and (3) for continuous supervision of the training programs conducted under the agreement to insure the quality and adequacy of the training provided), protect the United States against loss, and assure that the functions and duties to be carried out by such State agency are performed in such fashion as will carry out the purposes of this title. In the case of any State which does not enter into an agreement under this section, and in the case of any training which the State agency does not provide under such an agreement, the Secretary of Health, Education, and Welfare may provide the needed training by agreement or contract with public or private educational or training institutions.<sup>4</sup>



Manpower Development and Training Act, Title III--  
Miscellaneous

The Act did not specify an objective formula for apportionment of benefits. The Act did, however, provide guidelines and require that apportionment be made in a uniform manner. The factors specified for consideration were cited in Title III of this Act.

Sec. 301. For the purpose of effecting an equitable apportionment of Federal expenditures among the States in carrying out the programs authorized under title II of this Act, the Secretary of Labor and the Secretary of Health, Education, and Welfare shall make such apportionment in accordance with uniform standards and in arriving at such standards shall consider only the following factors: (1) the proportion which the labor force of a State bears to the total labor force of the United States, (2) the proportion which the unemployed in a State during the preceding calendar year bears to the total number of unemployed in the United States in the preceding calendar year, (3) the lack of appropriate full-time employment in the State, (4) the proportion which the insured unemployed within a State bears to the total number of insured employed within such State, and (5) the average weekly unemployment compensation benefits paid by the State. The Secretary of Labor and the Secretary of Health, Education, and Welfare are authorized to make reapportionments from time to time where the total amounts apportioned under this section have not been fully obligated in a particular State, or where the State or appropriate agencies in the State have not entered into the necessary agreements, and the Secretaries find that any other State is in need of additional funds to carry out the programs authorized by this Act.<sup>5</sup>

Both the Secretary of Labor and the Secretary of Health, Education and Welfare were charged with the responsibility of preparing an annual report. In the last year of the original Act Congress passed Public Law 88-214 which amended and extended the Manpower Development and Training Act; and subsequent amendments further extended the life of the Act.

Higher Education Facilities Act of 1963--  
Public Law 88-204

The extent of opportunity and the quality of education were examined at length by the Administration and the Congress in the early years of the decade of the 1960's. President Kennedy frequently urged Congress to increase Federal aid for higher education. In a message to Congress on February 20, 1961, he stated:

Our colleges and Universities represent our ultimate educational resource. In these institutions are produced the leaders and other trained persons whom we need to carry forward our highly developed civilization. If the colleges and universities fail to do their job, there is no substitute to fulfill their responsibility. . . .

The national interest requires an educational system on the college level sufficiently financed and equipped to provide every student with adequate physical facilities to meet his instructional, research and residential needs.<sup>6</sup>

After two years of hearings and debate on various educational proposals the President's Science Advisory Committee summarized the conclusions:

1. Colleges and universities of all types face constantly increasing enrollments to the extent that they cannot provide the necessary classrooms, laboratories and libraries they need for students currently enrolled.
2. The pressure of new knowledge on colleges and universities requires even newer and more expensive research facilities and equipment.
3. The population of 18-22 year-old group will total 17.8 million by 1970 and the college enrollment will rise to 7 million by that time.
4. Expenditures of institutions of higher education for physical plant have increased from \$84 million in 1940 to \$1,192 million in 1960. . . .

5. Neither the institutions nor the state and local governments can afford to increase their expenditures to the total amount of \$3 billion needed in time to provide for immediate enrollment increases.
6. The shortage of funds has caused many institutions to steadily raise their tuition and other charges . . . which in turn, have prevented in each year about 100,000 youths of high ability from attending colleges.
7. Between 1960 and 1970 this country needs approximately 170,000 scientists and engineers, 150,000 social workers, 1,090,000 teachers, . . . 9,600 physicians, but the facilities of present colleges and universities are far behind the capacity of meeting those demands.
8. The intellect of the young people is a natural resource that must be developed and used to the fullest, and higher education is a means to develop this resource. In an economic sense, it is to produce capital in the form of improved intellectual equipment for future service in the society. Thus, expenditures on higher education are investments. Achieving quality may be costly, but falling short of it will be even costlier.<sup>7</sup>

In view of these facts and needs, Congress passed Public Law 88-204, the Higher Education Facilities Act of 1963, in which it declared that this and future generations of American youth be assured ample opportunity for the fullest development of their intellectual capacities, and that these needs are so great and these steps so urgent that it is incumbent upon the nation to take positive and immediate action to meet these needs through assistance to institutions of higher education.

The Higher Education Facilities Act was passed to authorize assistance to public and other nonprofit institutions of higher education in financing the construction,

rehabilitation or improvement of needed academic and related facilities in undergraduate and graduate institutions. Thus both private and public institutions were eligible, as were undergraduate and graduate institutions.

The national interest was reiterated in Section 2--  
Findings and Declaration of Policy--Public Law 88-204:

Sec. 2. The Congress hereby finds that the security and welfare of the United States require that this and future generations of American youth be assured ample opportunity for fullest development of their intellectual capacities, and that this opportunity will be jeopardized unless the Nation's colleges and universities are encouraged and assisted to a higher education. The Congress further finds and declares that these needs are so great and these steps so urgent that it is incumbent upon the Nation to take positive and immediate action to meet these needs through assistance to institutions of higher education, including graduate and undergraduate institutions, junior and community colleges, and technical institutes, in providing certain academic facilities.<sup>8</sup>

However, despite a claim for national interest, the role of the Federal Government was specifically restrained. The last section of the Higher Education Facilities Act provides:

Sec. 407. No department, agency, officer, or employee of the United States shall, under authority of this Act, exercise any direction, supervision, or control over, or impose any requirements or conditions with respect to, the personnel, curriculum, methods of instruction, or administration of any educational institution.<sup>9</sup>

The Higher Education Facilities Act is given in four titles which are summarized below; and then are listed separately with their specific provisions. The summary is quoted:

Higher Education Facilities Act - Authorizes a 5-year program of grants to institutions of higher education for the construction of academic facilities. Provides for the allotment of 22 percent of such funds to the States for the construction of public community colleges and technical institutions in accordance with a formula based on high school graduates and per capita income. Provides for the allotment of the remaining funds one-half on the basis of the relative number of students enrolled in institutions of higher education and the other half on the relative number enrolled in high schools. Makes funds available for development costs. Limits the Federal share of costs to 33 1/3 percent (40 percent for community colleges).

Requires States to submit a plan for participation in the grant program. Sets forth the requirements for such plans including assignment of priorities, hearings as to priority assignment, and necessary fiscal controls. Requires grants be for the construction of structures designed for instruction or research in the sciences, mathematics, foreign languages, or engineering, or for use as a library.

Sets the period of Federal interest in projects aided at 20 years and permits recovery of funds if the facility ceases to be used in accordance with the program within that period.

Authorizes a 5-year program of Federal grants for the construction of graduate academic facilities. Limits such grants to 33 1/3 percent of the costs. Provides for the appointment of an Advisory Committee to provide advice with respect to applications for grants and in the preparation of regulations and criteria for awarding such grants.

Authorizes a 5-year program of loans to institutions of higher education for the construction of academic facilities. Requires loans to be repaid within 50 years. Sets the interest rate at 1/4 of 1 percent above the rate paid on public debt obligations. Requires 25 percent of the cost to be financed by non-Federal sources.

Requires compliance with the prevailing wage and hour laws (Davis-Bacon Act) for projects assisted hereunder. Prohibits Federal interference with the personnel, curriculum methods of instruction, or administration of any educational institution receiving aid.<sup>10</sup>

Higher Education Facilities Act, Title I--  
Grants for Construction of Undergraduate Facilities

Under Title I, Federal grants are provided on an objective formula matching basis. The Congress authorized to be appropriated the sum of \$230 million for the first three years of the Act, which was to extend for five years. The last two years were to be funded as subsequent sessions of Congress would determine, and as subsequent amendments would provide. Allotments were set into two parts. Twenty-two percent to be allotted among the States for use in providing academic facilities for public community colleges and technical institutes. The remainder of the funds appropriated were to be allotted among the States for use in providing facilities for institutions of higher education other than public community colleges and public technical institutes.

The formula for allotment among the States for community colleges and technical institutes differs from that for other higher education institutions. For community colleges and technical institutes the formula was based on two factors: (1) the number of high school graduates of the State, and (2) the State's allotment ratio. The allotment ratio was set at 1.00 less the product of (A) .50 and (B) the quotient obtained by dividing the income per person for the State by the income per person for all the States, as given below:

$$\text{State's allotment ratio} = 1.00 - .50 \times \frac{\text{per capita income for the state}}{\text{per capita income for the 50 states}}$$

The Act states that the Commission shall allot to each State for each fiscal year an amount which bears the same ratio to the funds being allotted as the product of (1) and (2) given above in this paragraph, except that the ratio in no case shall be less than  $33 \frac{1}{3}$  or more than  $66 \frac{2}{3}$ . Thus, at least up to the limits prescribed, the higher the portion of the population graduating from high school or the lower the state per capita income the greater would be the share for a particular state.

Allotments to States for institutions of higher education other than community colleges and technical institutes are determined by a formula with different factors: enrollment in institutions of higher education and enrollment in grades nine through twelve. The Act provides: (1) one-half shall be allotted by the Commissioner among the States so that the allotment to each State bears the same ratio to such one-half as the number of students enrolled in the institutions of higher education in such State bears to the total number of students enrolled in such institutions in all the States; and (2) the remaining one-half shall be allotted by him among the States so that the allotment to each State will bear the same ratio to such remainder as the number of students enrolled in grades nine through twelve of schools in such State bears to the total number of students in such grades in schools in all the States.

Thus for institutions of higher education, other than community colleges and technical institutes, the higher the portion of the age group enrolled in high school and the higher the enrollment in institutions of higher education the greater be that States share of the total allocation.

Any State desiring to participate in the grant program was required by the legislation to designate, or establish, a State agency, broadly representative of the public and of institutions of higher education including junior colleges and technical institutes. And the Act required the Commissioner to approve the State plan before allotments be approved for that State.

Vocational Education Act of 1963--Public Law 88-210  
and the Vocational Amendments of 1968

Vocational Education Act of 1963

Public Law 88-210 encompassed several areas of concern for secondary and post-secondary education. The Act amended and extended the Vocational Education Acts, the National Defense Act, Public Laws 815 and 873 and the Manpower Development and Training Act of 1962.

A panel of consultants reported prior to the 1963 Act that low enrollments in urban areas were especially disturbing and that Vocational education was neither retraining dropouts nor preparing them for employment.<sup>11</sup> The Vocational Education Act of 1963 directed emphasis away from occupational categories to groups of people. And as the



Manpower Development and Training Act, the intent was to provide programs to address the needs of specifically identified groups of people, rather than to fill particular manpower needs. The intent is summarized in the Vocational and Technical Education Annual Report for Fiscal Year 1969:

The Vocational Education Act of 1963 set a new pattern for Federal support of public vocational education and made training for "gainful employment" a goal of all programs it supported. The intent was to modernize and redirect the entire vocational system, put resources within reach of all persons in all communities, and offer training for job entry or career advancement in virtually every occupation below the professional or 4-year degree level.<sup>12</sup>

This clearly reiterates a public policy of declaring a national interest in advancing the occupational opportunities of individuals and of insuring opportunity for all persons.

Part A, of three parts, in Public Law 88-210 is identified as the Vocational Education Act of 1963. The purpose of that part is summarized in the Declaration of Purpose:

Sec. 1. It is the purpose of this part to authorize Federal grants to States to assist them to maintain, extend, and improve existing programs of vocational education, to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational training on a full-time basis, so that persons of all ages in all communities of the State--those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, and those with special educational handicaps--will have ready access to vocational training or retraining which is of high quality, which is

realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training.<sup>13</sup>

The Act authorized appropriations of \$60,000,000, \$118,000,000 and \$177,000,000 a year for the first three fiscal years respectively and \$225,000,000 for each year thereafter (an amount which Congress increased each year from 1965 to 1969). The Act specified a formula for allotting forthcoming appropriations to the States. The factors were (1) an allotment ratio determined by per capita income, and (2) the number of individuals in the target populations.

The allotment for any State was set at 1.00 less the product of (A) .50 and (B) the quotient obtained by dividing the per capita income for the State by the per capita income for all the States, as given below:

$$\text{State's allotment ratio} = 1.00 - .50 \times \frac{\text{per capita income for the state}}{\text{per capita income for the 50 states}}$$

The portion for any state would be fixed by the same ratio to the funds appropriated as the ratio of the product of the State's allotment ratio times the population in its target group would bear to the sum of all such products. The age groups and portions are fixed in the Act:

Sec. 3. (a) Ninety per centum of the sums appropriated pursuant to section 2 shall be allotted among the States on the basis of the number of persons in the various age groups needing vocational education and the per capita income in the respective States as follows: The Commissioner shall allot to each State for each fiscal year--

(1) An amount which bears the same ratio to 50 per centum of the sums so appropriated for such year, as the product of the population aged fifteen to nineteen, inclusive, in the State in the preceding fiscal year and the State's allotment ratio bears to the sum of the corresponding products for all the States; plus

(2) An amount which bears the same ratio to 20 per centum of the sums so appropriated for such year, as the product of the population aged twenty to twenty-four, inclusive, in the State in the preceding fiscal year and the State's allotment ratio bears to the sum of the corresponding products for all the States; plus

(3) An amount which bears the same ratio to 15 per centum of the sums so appropriated for such year, as the product of the population aged twenty-five to sixty-five, inclusive, in the State in the preceding fiscal year and the State's allotment ratio bears to the sum of the corresponding products for all the States; plus

(4) An amount which bears the same ratio to 5 per centum of the sums so appropriated for such year, as the sum of the amounts allotted to the State under paragraphs (1), (2), and (3) for such year bears to the sum of the amounts allotted to all the States under paragraphs (1), (2), and (3) for such year.<sup>14</sup>

As in the Higher Education Facilities Act, the higher the population in the target age group or the lower the state per capita income the greater the share for a particular state.

This Act also included a Federal control disclaimer.

Section 16 of the Act follows:

Nothing contained in this part shall be construed to authorize any department, agency, officer, or employee of the United States to exercise any direction, supervision, or control over the curriculum, program of instruction, administration, or personnel of any educational institution or school system.<sup>15</sup>

### Vocational Education Amendments of 1968

The Amendments of 1968 extended and amended the Vocational Education Act of 1963. The Amendments authorized appropriations of \$565 million and \$675 million for fiscal years 1970 and 1971; and \$750 million for 1971 and 1972. The allotment among the States was to be on the same basis as the allotment given in the 1963 Act; except that the factor for adjusting for the level of per capita income was limited. The Amendments provided that no State should have an allotment ratio of higher than .60 or lower than .40.

Provisions were made regarding the distribution among communities within a State. The Amendments provided that Federal funds allocated to local education agencies could require matching with local expenditures only to the extent that the same considerations would be required throughout the State. As an exception it was provided that no local educational agency which was making a reasonable tax effort would be denied funds for the establishment of new vocational programs solely because the local education agency is unable to pay the non-Federal share of the cost of such programs.

### Nurse Training Act of 1964 and Allied Health Professions Act of 1966--Public Laws 88-581 and 89-751

Both the Nurse Training Act and the Allied Health Professions Act were passed as amendments to and extensions of

the Public Health Service Act. The Nurse Training Act amended the previous Act by adding a new title at the end of the Public Health Service Act: Title VIII. The Allied Health Professions Act amended the Public Health Services Act by adding to the end of Title VII of that Act a new part.

Nurse Training Act of 1964--Public Law 88-581

The provisions of the Act are outlined in the Digest of Public General Bills:

Nurse Training Act--Authorizes \$5 million for 1966 and \$10 million for each of the next three years for grants to assist in the construction of new facilities for collegiate schools of nursing or replacement or rehabilitation of existing facilities for such schools. Authorizes \$10 million for each of the next three fiscal years for grants to assist in the construction of new facilities for associate degree or diploma schools of nursing, or replacement or rehabilitation of existing facilities.

Authorizes appropriations to cover cost of traineeships for training of professional nurses to teach in various fields and costs of undergraduate scholarships for nursing students. Authorizes \$3.1 million for 1965; \$8.9 million for 1966; \$16.8 million for 1967; \$25.3 million for 1968; and \$30.9 million for 1969; also, provides for loans to schools for financing deposits in a loan fund.

Establishes a National Advisory Council on Nurse Training consisting of 16 members appointed by the Secretary of Health, Education, and Welfare.<sup>16</sup>

There are several requirements for eligibility. The institution must be a nonprofit, public or private institution which is accredited. There must be assurance that the facilities will be employed for twenty years, and that sufficient non-Federal funds will be available for the

immediate construction and for subsequent operation. And there must be evidence that there will be sufficient enrollment in following years. And in the event that the facilities are not continued as appropriate training centers there is a clause whereby the Federal Government will recapture the same share of the value at that time as the share of the cost of construction which the Federal Government provided at the time of construction.

The amount of any grant for a construction project under Part A of this Act was established as that amount to be determined by the Surgeon General. However, the Act stipulated that the Federal share was not to exceed  $66 \frac{2}{3}$  percent of the necessary cost of the construction of new facilities and not more than 50 percent of the construction cost of other facilities.

Assistance to nursing students was provided in traineeships for the training of professional nurses to teach in the various fields of nursing, to serve in administrative or supervisory capacities. In order to make loans available for other students the Act provided that loan funds could be established in the respective schools, into which Federal contributions would be made. Appropriations were authorized which ranged from \$3,100,000 to \$30,900,000 for fiscal year 1969.

The allotment of Federal capital funds among states was established on an objective formula. The factors established were high school enrollment and enrollment in

public or nonprofit private schools of nursing. The Act provided that the Secretary of Health, Education and Welfare should determine the allotments as follows:

He shall allot to each State an amount which bears the same ratio to 50 per centum of such sums as the number of students who graduated from secondary schools in such State bears to the total number of students who graduated from secondary schools in all of the States during such year; and (2) he shall also allot to each State an amount which bears the same ratio to 50 per centum of such sums as the number of students who will be enrolled full time in public or nonprofit private schools of nursing in such State bears to the total number of students who will be enrolled full time in all such schools of nursing in all of the States.<sup>17</sup>

There are several provisions of the Act which address the relation of the Federal Government to the States and the profession. The Act provided that a National Advisory Council on Nurse Training be appointed by the Secretary. Four members must be from the general public and twelve from among leading authorities in the fields of nursing, higher and secondary education and hospitals. The Act specified the necessity of consulting the Council:

Before approving or disapproving an application for a construction project under this Part, the Surgeon General shall secure the advice of the National Advisory Council on Nurse Training. . . .<sup>18</sup>

The Act further provided where a State or regional agency existed the application for the construction or training program to be supported must be reviewed by that agency. And any comments or recommendations by that agency were to be taken under consideration. And in this Act, as in the Higher Education Facilities Act and the Manpower Development and Training Act, a clause was added which

prevents any agent or employee of the Federal Government from interfering with the curriculum or administration of any institution.

This Act was subsequently amended and extended. The Allied Health Professions Act of 1966 made additional provisions concerning construction grants, student loans and opportunity grants for students in nursing programs.

Allied Health Professions Act of 1966--Public Law 89-751

The Allied Health Professions and Training Act provides for Federal assistance to increase the opportunities for training persons in allied health professions. The Act was passed in order to improve the educational quality of the schools and to improve loan programs for medical, osteopathic, dental, podiatry, pharmacy and nursing students.

Allied Health Professions Act, Construction Grants

This section authorizes appropriations for the construction or replacement of facilities:

Sec. 791 (a) (1) There are authorized to be appropriated for grants to assist in the construction of new facilities for training centers for allied health professions, or replacement or rehabilitation of existing facilities for such centers, \$3,000,000 for the fiscal year ending June 30, 1967; . . . and \$13,500,000 for the fiscal year ending June 30, 1969.<sup>19</sup>

In order to be approved, the Act specified that an applicant must be a public or private nonprofit training center for allied health professions. There must be



reasonable assurances that the facilities will be used for the purposes of the grant for a period of ten years (note that this period was 20 years in the Nurse Training Act of 1964). And the applicant must show assurances of sufficient funds to provide the non-Federal portion of the construction and to carry on the subsequent program of instruction.

The basis for approval includes several considerations. Desired goals included expansion of existing facilities and institutions; improvement of existing facilities and achieving a more equitable and wider geographic distribution. Again the Act provided that up to 66 2/3 percent of construction costs of new facilities could be Federal funds while 50 percent of replacement and rehabilitation costs could be Federal funds. And provision was made for recapture of Federal funds if the facility ceased the training for which purpose the grant was made, if the facility ceased to be public or nonprofit or if the facility were used as a place for religious worship or instruction.

Allied Health Professions Act, Grants to Improve the Quality of Training Centers

In order to improve the quality of training programs several types of grants were approved. There were basic improvement grants, special improvement grants, and support of traineeships and grants for development of new methods.

Authorizations under this section were set to increase annually from \$9,000,000 for the fiscal year ending June 30, 1967, to \$17,000,000 for the fiscal year ending June 30, 1969

(later extended). The purpose of the authorization was to assist training centers for the allied health professions and otherwise improve the quality of instruction.

An objective formula was established for the allotment of basic improvement grants. The Surgeon General was authorized to determine the amount for each institution whose application for a basic improvement grant had been approved. Two factors were specified in the formula. The grant was to equal the product of \$5,000 times the number of curricula specified in this Act (Section 795) plus the product of \$500 times the number of full time students in such institution.

In addition to the basic improvement grants special improvement grants may be made. The requirements for eligibility of a training center are the same as those for the basic improvement grants. The special grant may be made to contribute toward the provision, maintenance or improvement of a specialized function which a center provides. The Act limited the amount of such grants to \$100,000 for any fiscal year. In all cases the center must show that its expenditures are increased or at least maintained at the level of expenditures prior to the awarding of the grant.

The Act authorized appropriation for traineeships for advanced training of allied health professions personnel. The Act authorized appropriations in increasing amounts up to \$3,500,000 for the fiscal year ending June 30, 1969 (subsequently extended). The grants were specified for the

purpose of training persons to teach health services technicians or to serve in administrative or supervisory capacity.

Grants for the development of new methods were also authorized. Appropriations were authorized in increasing amounts up to \$3,000,000 for the fiscal year ending June 30, 1969 (also subsequently extended). The purpose of such grants was stated as being to develop, demonstrate or evaluate curriculums for the training of new types of health technologists.

Allied Health Professions Act, Loan Funds for Health Professions Student Loans

The Allied Health Professions Act established a revolving loan fund from which schools may obtain loans to capitalize health professions student loan funds. This amendment was made as an extension of Title VIII-C of the Public Health Services Act. The intent is defined in the Act:

Sec. 744 (a) (1) During the fiscal years ending June 30, 1967 and June 30, 1968 the Secretary may make loans, from the revolving fund established by subsection (d), to any public or other nonprofit school . . . which is located in a State and is accredited . . . to provide all or part of the capital needed by any such school for making loans to students under this section. . . .<sup>20</sup>

The Act provided that the Secretary compensate for some losses and expenses of the school. An amount of up to 90 percent of the schools losses on defaults was to be paid; and compensation made for the loss due to the differential

between the interest the school paid on capital and that which it received, collection expenses and the amount of principal canceled pursuant to the provisions of this Act. A revolving fund was established in the Treasury, available to the Secretary, to consist of appropriations in this Act, appropriations pursuant to this Act, and revenues received as interest and principal under operations of this section of the Allied Health Professions Act.

The Act provides that appropriations shall be made as are necessary to carry out the commitments given above. And in addition the Act provides that any funds in excess of those commitments to the schools, either from appropriations or from revenue received as interest or payments on principal, shall be allotted among schools in such manner as the Secretary determines will best carry out the purposes of the Act.

Allied Health Professions Act, Loan Funds for  
Schools of Nursing

This part of the Allied Health Professions Act amended Title VIII-B of the Public Health Services Act and established a revolving fund from which schools of nursing could obtain loans to capitalize student loan funds. As in the section above relating to health profession student loans this section provides an amount of up to 90 percent of losses on defaults; losses due to interest differentials; collection expenses and compensation for principal which is canceled under provisions of this Act.

Allied Health Professions Act, Opportunity Grants

The statement of purpose for opportunity grants is given in this part of the Act:

Sec. 861. (a) It is the purpose of this part to provide, through schools of nursing . . . , nursing educational opportunity grants to assist in making available the benefits of nursing education to qualified high school graduates of exceptional financial need, who for lack of financial means of their own or their families would be able to obtain such benefits without such aid.

(b) There are hereby authorized to be appropriated \$3,000,000 for the fiscal year ending June 30, 1967, \$5,000,000 for the fiscal year ending June 30, 1968, and \$7,000,000 for the fiscal year ending June 30, 1969, to enable the Secretary to make payments to schools of nursing that have agreements with him entered into under section 867, for use by such schools for payment to undergraduate students for the nursing educational opportunity grants awarded to them under this part. . . .<sup>21</sup>

This section further provided that a student who was awarded a grant under this section would be paid one of two sums. The student would be paid either \$800 or one-half of the amount of financial aid provided such student under any scholarship program established by the State or private organization. Further, those students who ranked in the top half of their class for the preceding year were to receive an additional \$200. This section further provided that students who received a grant for any year were to continue receiving such awards as long as the student continued satisfactory, full time progress in the school for a period of up to four years.

A further provision of the Act was to provide grants, not to exceed \$100,000 in any one year, to encourage full utilization of nursing educational talent. The purposes were stated as those of identifying qualified youth of exceptional financial need and encouraging them to undertake training in the field of nursing, and of publicizing existing forms of financial aid for nursing students, including such aid as provided under this Act.

Higher Education Act of 1965--Public Law 89-329

Higher Education Act of 1965, Title I--  
Community Service and Continuing Education Programs

The purposes for this Title were given together with the authorization of appropriations, as quoted below:

Sec. 101. For the purpose of assisting the people of the United States in the solution of community problems such as housing, poverty, government, recreation, employment, youth opportunities, transportation, health, and land use by enabling the Commissioner to make grants under this title to strengthen community service programs of colleges and universities, there are authorized to be appropriated \$25,000,000 for the fiscal year ending June 30, 1966, and \$50,000,000 for the fiscal year ending June 30, 1967, and for the succeeding fiscal year. For the fiscal year ending June 30, 1969, and the succeeding fiscal year, there may be appropriated, to enable the Commissioner to make such grants, only such sums as the Congress may hereafter authorize by law.<sup>22</sup>

The Higher Education Amendments of 1968 extended authorization for appropriations. The Amendments authorized \$10,000,000 for the fiscal year ending June 30, 1969, \$50,000,000 for the fiscal year ending 1970 and \$60,000,000 for the fiscal year ending June 30, 1971.

The coordination of educational programs with activities which deal with community problems which extend beyond the bounds and usual activities of educational institutions is a step which many advisory commissions have recommended. In this Act community service was broadly defined to mean an educational program, activity or service, including research, university extension and continuing education which is designed to assist in the solution of community problems.<sup>23</sup>

An objective formula for allotments among States was established in the Act, with two factors which determined the amount for each State. First a base grant of \$100,000 was allotted each State, except that \$25,000 was allotted for Guam, American Samoa, Puerto Rico and the Virgin Islands. Above that amount a ratio was established which calls for the remainder of the funds appropriated in any year to be allotted in the same proportion as the respective populations of the States. Limits to the Federal share of the cost of individual programs was set at 75 percent in fiscal years 1966 and 1967, and 50 percent thereafter. The Higher Education Amendments of 1968 amended that provision to allow Federal participation up to 66 2/3 percent of the cost after June 30, 1969.

The Act required that a State must have or establish a State agency competent to deal with community problems and representative of the institutions of higher education in the State in order to be eligible. The Higher Education

Amendments of 1968 amended that provision so that where insufficient funds prevented a comprehensive, coordinated and statewide system community service programs could be substituted in lieu of the State agency. And at the Federal level the Act provided for the creation of the National Council on Extension and Continuing Education. The membership of the Council clearly indicates an intent to coordinate the activities of various agencies and departments of the Federal Government which bear upon higher education. The make-up of the Council was specified in the Act:

Sec. 109. (a) The President shall, within ninety days of enactment of this title, appoint a National Advisory Council on Extension and Continuing Education (hereafter referred to as the "Advisory Council"), consisting of the Commissioner, who shall be Chairman, one representative each of the Departments of Agriculture, Commerce, Defense, Labor, Interior, State, and Housing and Urban Development, and the Office of Economic Opportunity, and of such other Federal agencies having extension education responsibilities as the President may designate, and twelve members appointed, for staggered terms and without regard to the civil service laws, by the President.<sup>24</sup>

Higher Education Act of 1965, Title III--  
Strengthening Developing Institutions

The statement of purpose and the authorization of appropriations were given together in the Title.

Sec. 301. (a) The purpose of this title is to assist in raising the academic quality of colleges which have the desire and potential to make a substantial contribution to the higher education resources of our Nation but which for financial and other reasons are struggling for survival and are isolated from the main currents of academic life, and to do so by enabling the Commissioner to establish a



national teaching fellow program and to encourage and assist in the establishment of cooperative arrangements under which these colleges may draw on the talent and experience of our finest colleges and universities, and on the educational resources of business and industry, in their effort to improve their academic quality.

(b) (1) There is authorized to be appropriated the sum of \$55,000,000 for the fiscal year ending June 30, 1966, to carry out the provisions of this title.

(2) Of the sums appropriated pursuant to this section for any fiscal year, 78 per centum shall be available only for carrying out the provisions of this title with respect to developing institutions which plan to award one or more bachelor's degrees during such year.

(3) The remainder of the sums so appropriated shall be available only for carrying out the provisions of this title with respect to developing institutions which do not plan to award such a degree during such year.<sup>25</sup>

The Higher Education Amendments of 1968 authorized appropriations of \$35,000,000 for fiscal 1969, \$70,000,000 for fiscal 1970 and \$91,000,000 for fiscal 1971. The Amendments also reduced the portion to institutions offering the bachelors degree from 78 to 77 percent. While that is only a 1 percent reduction, the increase from 22 to 23 percent for community colleges and technical institutes constitutes an increase of between 4 and 5 percent.

The Title specified that in order to qualify as a developing institution, the institution had to be a public or nonprofit education institution in any State. Further, the institution must meet accreditation requirements and have been in existence at least 15 years. And the institution had to show reasonable effort to improve the quality

of its teaching and administration but for financial or other reason the institution is struggling for survival and is isolated from the mainstream of academic life.

The Commissioner was authorized to make grants for cooperative agreements. The type of agreements specified include a wide range of possibilities:

Sec. 304. (a) The Commissioner is authorized to make grants to developing institutions and other colleges and universities to pay part of the cost of planning, developing, and carrying out cooperative arrangements which show promise as effective measures for strengthening the academic programs and the administration of developing institutions. Such cooperative arrangements may be between developing institutions, between developing institutions and other colleges and universities, and between developing institutions and organizations, agencies, and business entities. Grants under this section may be used for projects and activities such as--

- (1) exchange of faculty or students, including arrangements for bringing visiting scholars to developing institutions;
  - (2) faculty and administration improvement programs utilizing training, education (including fellowships leading to advanced degrees), internships, research participation, and other means;
  - (3) introduction of new curriculums and curricular materials;
  - (4) development and operation of cooperative education programs involving alternate periods of academic study and business or public employment;
  - (5) joint use of facilities such as libraries or laboratories, including necessary books, materials, and equipment; and
  - (6) other arrangements which offer promise of strengthening the academic programs and the administration of developing institutions.
- (b) A grant may be made under this section only upon application to the Commissioner at such time or times and containing such information as he deems necessary.<sup>26</sup>

This Title also established a system of National Teaching Fellowships. The provisions of the Title are given below:

Sec. 305. (a) The Commissioner is authorized to award fellowships under this section to highly qualified graduate students and junior members of the faculty of colleges and universities, to encourage such individuals to teach at developing institutions. The Commissioner shall award fellowships to individuals for teaching at developing institutions only upon application by an institution approved for this purpose by the Commissioner and only upon a finding by the Commissioner that the program of teaching set forth in the application is reasonable in the light of the qualifications of the teaching fellow and of the educational needs of the applicant.

(b) Fellowships may be awarded under this section for such period of teaching as the Commissioner may determine, but such period shall not exceed two academic years. Each person awarded a fellowship under the provisions of this section shall receive a stipend for each academic year of teaching of not more than \$6,500 as determined by the Commissioner upon the advice of the Council, plus an additional amount of \$400 for each such year on account of each of his dependents.<sup>27</sup>

In order to encourage utilization of educational talent provision was made for seeking talent and publicizing the opportunities for students made available in this Title. The purposes are given:

Sec. 408. (a) To assist in achieving the purposes of this part the Commissioner is authorized . . . to enter into contracts, not to exceed \$100,000 per year, with State and local educational agencies and other public or nonprofit organizations and institutions for the purpose of--

(1) identifying qualified youths of exceptional financial need and encouraging them to complete secondary school and undertake postsecondary educational training,

(2) publicizing existing forms of student financial aid, including aid furnished under this part, or

(3) encouraging secondary-school or college dropouts of demonstrated aptitude to reenter educational programs, including post-secondary-school programs.

(b) There are hereby authorized to be appropriated such sums as may be necessary to carry out this section.<sup>30</sup>

Part B of this Title provides for student loans at low interest rates. The Act authorized \$17,500,000 to States and nonprofit organizations to enable them to set up student loan funds. The Act provided that the Federal Government would pay the interest while the student attended school and would thereafter pay to the organization the difference between the student's interest rate and the cost of capital. The program was extended by the Higher Education Amendments of 1968.

Higher Education Act of 1965, Title IV--  
Student Assistance

The purpose of Part A, Title IV was stated clearly in the Act as follows:

Sec. 401. (a) It is the purpose of this part to provide, through institutions of higher education, educational opportunity grants to assist in making available the benefits of higher education to qualified high school graduates of exceptional financial need, who for lack of financial means of their own or of their families would be unable to obtain such benefits without such aid.<sup>28</sup>

The Act authorized appropriations of \$70,000,000 for each of the following three fiscal years. The Higher Education Amendments authorized \$100,000,000 for fiscal 1970 and \$140,000,000 for fiscal 1971.

Grants to students were limited to at least \$200 but not more than \$800 per student, except that the grant could not exceed one-half of the amount provided by other financial aids to the student. The Higher Education Amendments of 1968 increased the maximum of \$800 to \$1,000.

The allotment formula for allotment of funds among States was made the same as the formula used for allotting National Defense Education Act student loan funds. That formula is given:

Sec. 405. (a) (1) From the sums appropriated pursuant to the first sentence of section 401 (b) for any fiscal year, the Commissioner shall allot to each State an amount which bears the same ratio to the amount so appropriated as the number of persons enrolled on a full-time basis in institutions of higher education in such State bears to the total number of persons enrolled on a full-time basis in institutions of higher education in all the States. The number of persons enrolled on a full-time basis in institutions of higher education for purposes of this section shall be determined by the Commissioner for the most recent year for which satisfactory data are available to him.

(2) If the total of the sums determined by the Commissioner to be required under section 406 for any fiscal year for eligible institutions in a State is less than the amount of the allotment to that State under paragraph (1) for that year, the Commissioner may reallocate the remaining amount from time to time, on such date or dates as he may fix, to other States in such manner as he determines will best assist in achieving the purposes of this part.<sup>29</sup>

Part C of this Title provided for extension and amendment of student work study programs. Part C amended Parts C and D of the Economic Opportunity Act. Later the Higher Education Amendments of 1968 removed that program from the Economic Opportunity Act and made it a part of the Higher

Education Act, and extended that part of the Higher Education Act. The Higher Education Act authorized appropriations of \$129,000,000 for fiscal 1966, \$165,000,000 for fiscal 1967, and \$200,000,000 for fiscal 1968. The Higher Education Amendments extended authorization for appropriations of \$225,000,000 for fiscal 1969, \$255,000,000 for fiscal 1970 and \$285,000,000 for fiscal 1971. The matching provisions were amended in the Higher Education Act so that the Federal share may not exceed 80 percent of the compensation provided, except that the Commissioner may make exceptions if he determines such exceptions to be necessary to carry out the intent of the Act.

The Education Professions Development Act--  
Public Law 90-34

The Education Professions Development Act amended Title V of the Higher Education Act of 1965 by adding, among other amendments, Parts D and E. Part D was given the purpose of training personnel in programs other than higher education. The Higher Education Amendments of 1968 amended that provision by adding post secondary vocational education. Part E was directed to post secondary training. The intent was given in the Education Professions Development Act:

Sec. 541. (a) The Commissioner is authorized to make grants to, or contracts with, institutions of higher education to assist them in training persons who are serving or preparing to serve as teachers, administrators, or educational specialists in institutions of higher education.

(b) Grants or contracts under this section may provide for use of funds received thereunder only to assist in covering the cost of courses of training or study (including short-term or regular-session institutes and other preservice and inservice training programs) for such persons, and for establishing and maintaining fellowships or traineeships, except that funds may not be used for fellowships which are eligible for support under title IV of the National Defense Education Act of 1958, or for seminars, conferences, symposia, and workshops unless these are part of a continuing program of inservice or preservice training.<sup>31</sup>

The Commissioner was authorized by this Act to enter into agreements with institutions and provide stipends to participants as he determines necessary and consistent with prevailing practices in other Federal programs. The Act authorized appropriations for Part E of \$21,500,000 for fiscal 1969 and \$36,000,000 for fiscal 1970. The Higher Education Amendments extended that amount through 1971, and it was subsequently extended through 1972.

# NOTES

1. United States, Statutes at Large, Vol. LXX, p. 23.
2. Ibid., p. 23.
3. Ibid., p. 25.
4. Ibid., p. 30.
5. Ibid., pp. 30-31.
6. Hsien Lu, Federal Role in Education (New York: The American Press, 1965), p. 190.
7. Lu, p. 191.
8. United States, Public Law 88-204, Higher Education Facilities Act (Washington, D. C.: U. S. Government Printing Office, 1963) Section 2.
9. Ibid., Section 407.
10. United States, Digest of Public General Bills and Selected Resolutions 88th Congress (Washington, D. C.: Library of Congress Legislative Reference Service, 1964), p. XXI.
11. Joel S. Berke and Michael W. Kirst, Federal Aid to Education Who Benefits? Who Governs? (Massachusetts: Lexington Books, 1972), p. 394.
12. United States Department of Health, Education, and Welfare, Vocational and Technical Education Annual Report Fiscal Year 1969 (Washington, D. C.: U. S. Government Printing Office, 1971), p. 1.
13. United States, Statutes at Large, Vol. LXXVII, p. 403.
14. Ibid., p. 404.
15. Ibid., p. 415.
16. United States, Digest of Public General Bills and Selected Resolutions 88th Congress, p. H.R. 11259.



17. United States, Statutes at Large, Vol. LXXVIII,  
p. 915.

18. Ibid., p. 910.

19. United States, Public Law 89-751, Allied Health Professions Act (Washington, D. C.: Government Printing Office, 1966), p. 1.

20. Ibid., p. 8.

21. Ibid., p. 14.

22. United States, Statutes at Large, Vol. LXXIX,  
p. 1219.

23. Ibid., p. 1219.

24. Ibid., p. 1223.

25. Ibid., p. 1229.

26. Ibid., pp. 1230-1231.

27. Ibid., p. 1231.

28. Ibid., p. 1232.

29. Ibid., p. 1234.

30. Ibid., p. 1235.

31. United States, Statutes at Large, Vol. LXXXII,  
p. 992.

## CHAPTER IV

### RELATIONSHIPS OF INCOME AND ENROLLMENT TO FEDERAL ALLOTMENTS ANALYSIS OF THE DATA

The primary problem, stated in Chapter I, was to determine the relationships, if any, that exist between the level of expenditures to community colleges, by State, under selected Federal programs and the level of per capita income and the level of enrollment in the respective States. In order to test the relationship between level of per capita income and Federal appropriations correlations were computed between the level of State per capita income ( $Y$ ) and the level of allocations per student enrolled in community college ( $X_e$ ).

The null hypothesis for each of the ten Federal Programs was that the coefficient of correlation equals zero. The hypothesis can be stated:

$r = 0$  for the correlation of any pair,  $Y$  and  $X_{e1}, \dots, X_{e12}$ .  
The alternate hypothesis can be stated:

$r \neq 0$  for the correlation of any pair,  $Y$  and  $X_{e1}, \dots, X_{e12}$ .

In the case that the null hypothesis is rejected there are two possible alternative solutions. If the value of a coefficient of correlation is sufficiently great to be significant and the sign is positive, a direct relation between the two variables is inferred. If the value is

sufficiently great to be significant and the sign is negative an inverse (equalizing) relation between the two variables is inferred.

In order to test the relationship between the level of Federal expenditures and the level of enrollment in the respective States correlations were computed between the level of enrollment in each State ( $E$ ) and the level of expenditures in each State ( $X_s$ ) for the selected Federal programs.

The null hypothesis for each of the Federal programs was that the coefficient of correlation equals zero. The hypothesis can be stated:

$$r = 0 \text{ for any correlation, } E \text{ and } X_{s1}, \dots, X_{s12}.$$

The alternate hypothesis can be stated:

$$r \neq 0 \text{ for any correlation, } E \text{ and } X_{s1}, \dots, X_{s12}.$$

In the case that the null hypothesis is rejected there are two possible alternatives. If the value of the coefficient of correlation is significant and positive we reject the null hypothesis and infer a direct relation. On the other hand, if the value of the coefficient is significant and has a negative sign we reject the null hypothesis and infer an inverse relation.

#### Categories and Codes of the Variables

The variables with which this chapter is concerned have been categorized and coded through an assignment of symbols as indicated below:

$X_s$  --Federal aid program allocations to States.

$X_e$  --Federal aid program allocations to States per student enrolled in community colleges.

E --State enrollments in community colleges.

Y --State per capita income.

Because both  $X_s$  and  $X_e$  include allocations to the States from ten separate aid programs it was necessary to assign subcodes to those variables.  $X_s$  variables have been subcoded as follows:

$X_{s1}$  --Higher Education Act of 1965, Title I, allocations to States.

$X_{s2}$  --Higher Education Act of 1965, Title III, allocations to States.

$X_{s3}$  --Higher Education Facilities Act of 1963, Title I, allocations to States.

$X_{s4}$  --Vocational Education Act of 1963, allocations to States.

$X_{s5}$  --Education Professions Development Act, Title V-E, allocations to States.

$X_{s6}$  --Manpower Development and Training Act, allocations to States.

$X_{s7}$  --Nurse Training Act of 1964, Special Projects Grants, allocations to States.

$X_{s8}$  --Nurse Training Act of 1964, Nursing Student Loans, allocations to States.

$X_{s9}$  --Nurse Training Act of 1964, Nursing Scholarships, allocations to States.

$X_{s10}$  --Allied Health Professions Personnel Training Act of 1966, Basic Improvement Grants, allocations to States.

$X_{s11}$  --Higher Education Act of 1965, Title IV, allocations to States.

$X_{s12}$  --Higher Education Act of 1965, College Work Study, allocations to States.

$X_e$  variables, Federal aid allocations to States per student enrolled have been subcoded as follows:

$X_{e1}$  --Higher Education Act of 1965, Title I, allocations to States per person enrolled in community colleges.

$X_{e2}$  --Higher Education Act of 1965, Title III, allocations to States per person enrolled in community colleges.

$X_{e3}$  --Higher Education Facilities Act, Title III, allocations to States per person enrolled in community colleges.

$X_{e4}$  --Vocational Education Act of 1963, allocations to States per person enrolled in community colleges.

$X_{e5}$  --Education Professions Development Act, Title V-E, allocations to States per person enrolled in community colleges.

$X_{e6}$  --Manpower Development and Training Act, allocations to States per person enrolled in community colleges.

- $X_{e7}$  --Nurse Training Act of 1964, Special Projects Grants, allocations to States per person enrolled in community colleges.
- $X_{e8}$  --Nurse Training Act of 1964, Nursing Student Loans, allocations to States per person enrolled in community colleges.
- $X_{e9}$  --Nurse Training Act of 1964, Nursing Scholarships, allocations to States per person enrolled in community colleges.
- $X_{e10}$  --Allied Health Professions Personnel Training Act of 1966, Basic Improvement Grants, allocations to States per person enrolled in community colleges.
- $X_{e11}$  --Higher Education Act of 1965, Title IV, allocations to States per person enrolled in community colleges.
- $X_{e12}$  --Higher Education Act of 1965, College Work Study, allocations to States per person enrolled in community colleges.

The coefficients of correlation between per capita income (Y) and the allocations per community college student ( $X_e$ ) are shown in Table 1 of this Chapter. In ten cases of twelve the sign is negative indicating an inverse (equalizing relation). However, in only two cases are the values significant at the .05 level. They are Strengthening Developing Institutions, Title III of the Higher Education

TABLE 1

CORRELATION OF STATE PER CAPITA INCOME (Y) AND  
EXPENDITURES PER STUDENT ENROLLED IN COMMUNITY  
COLLEGES ( $X_e$ ) FOR TWELVE FEDERAL PROGRAMS

Variable	Coefficient of Correlation With Per Capita Income (Y)	Significance at the .05 Level (.2730)	Mean Score for Variable	Standard Deviation for Variable
$X_{e1}$	+0.0916	--	0.49	0.78
$X_{e2}$	-0.5324	yes	5.50	8.47
$X_{e3}$	-0.2551	--	25.66	26.47
$X_{e4}$	-0.4063	yes	37.00	33.86
$X_{e5}$	+0.0667	--	0.73	1.57
$X_{e6}$	-0.1039	--	4.68	8.68
$X_{e7}$	-0.0292	--	2.53	5.10
$X_{e8}$	-0.1906	--	3.94	6.15
$X_{e9}$	-0.1777	--	4.00	5.66
$X_{e10}$	-0.1403	--	1.22	5.30
$X_{e11}$	-0.0720	--	--	--
$X_{e12}$	-0.0050	--	--	--

Act of 1965; and the Vocation Education Act of 1963. At the .10 level one additional program is significant. It is Title I of the Higher Education Facilities Act.

In only two cases are the signs positive, indicating a direct (disequalizing) relation. They are Community Service and Continuing Education Programs, Title I of the Higher Education Act of 1965; and Training Institutes, Title V-E of the Higher Education Professions Act.

Thus the relation between per capita income and Federal program allocations per community college student appears to be equalizing as the sign is negative in eight of ten cases. However, the values are significant in only two cases at the .05 level and one additional case at the .10 level. Thus the overall equalizing tendencies are very slight.

The coefficients of correlation between State enrollments ( $E$ ) and State allotments ( $X_g$ ) for community colleges in each of the selected programs are shown in Table 2 of this Chapter. The sign is positive in every case indicating a consistent direct relation. In ten of the twelve cases the value at the .05 level is significant. In those cases the null hypothesis of no relation is rejected and a direct relation is inferred. The cases which are not significant are Strengthening Developing Institutions, Title III of the Higher Education Act of 1965, and the Vocational Education Act of 1963. Those are the same two cases in which the relation of Federal allocations to the States and per capita income is significant and inverse (equalizing).



TABLE 2

CORRELATION OF STATE ENROLLMENT (E) AND  
STATE ALLOTMENTS ( $X_s$ ) FOR COMMUNITY  
COLLEGES IN TWELVE FEDERAL PROGRAMS

Variable	Coefficient of Correlation	Significance at the .05 Level (.2730)	Mean Score for Variable	Standard Deviation for Variable
$X_{s1}$	+0.3361	yes	16,370	27,279
$X_{s2}$	+0.2070	--	153,147	227,977
$X_{s3}$	+0.7179	yes	792,776	794,682
$X_{s4}$	+0.2117	--	1,200,192	1,552,864
$X_{s5}$	+0.5353	yes	28,600	49,627
$X_{s6}$	+0.8349	yes	161,243	415,169
$X_{s7}$	+0.3796	yes	38,142	52,317
$X_{s8}$	+0.6655	yes	79,497	123,111
$X_{s9}$	+0.6608	yes	89,523	138,414
$X_{s10}$	+0.9667	yes	33,966	85,217
$X_{s11}$	+0.9371	yes	--	--
$X_{s12}$	+0.7117	yes	--	--

Higher Education Act of 1965, Title I--  
Community Service and Continuing Education Programs

In 1971, \$835,744 was allotted to the States under Title I of the higher Education Act with a mean allotment of \$27,279. The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e1}$ , is positive;  $r = 0.0916$ . It was one of two positive relations out of the ten correlations of income and allocation per student. The value is, however, not significant at the .05 level. Mississippi with the lowest per capita income did rank eighth in allocations per student. The distribution of allocations per student was positively skewed. There were seven scores of \$2.70, \$2.58, \$2.52, \$2.50, \$2.10, \$1.92 and \$1.80 while all others were under \$1.00 with a mean of \$.49. A large number of States did not participate in this program at the community college level, more of them in the lower than the upper half of the income distribution.

The correlation between State enrollment and allocations to States is positive,  $r = 0.3361$ . This is significant at the .05 level. That correlation is surprisingly small, however, considering the method of allocation among States.

An objective formula for allotments was established in the Act, with two factors which determined the amount for each State. First a base grant of \$100,000 was to be given to each State. Above that amount a ratio was established which calls for the remainder of the funds to be allotted in the same proportion as the respective populations of the States.

Higher Education Act of 1965, Title III--  
Strengthening Developing Institutions

In 1971, \$7,785,500 was allotted to the States under Title III of the Higher Education Act--Strengthening Developing Institutions, with a mean allotment of \$227,977. The average allotment per student enrolled in community college was \$5.50. The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e2}$ , is negative,  $r = 0.5324$ , and significant at the .05 level.

The correlation between State enrollment and allocations to States was positive,  $r = 0.2070$ , which is not significant.

The Act specified that 22 percent, later amended to 23 percent, of funds appropriated were to be used for community colleges and vocational, technical institutes. The Commissioner was charged with established criteria for eligible expenditures for which grants could be made. The criteria for identifying developing institutions is, of course, critical to determining the distribution of funds among States.

Higher Education Facilities Act of 1963, Title I

In 1971, \$40,769,408 was allotted to the States under Title I of the Higher Education Facilities Act with a mean State allotment of \$792,776, for community colleges. The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e3}$ , is negative,  $r = 0.2551$ . That

value is not significant at the .05 level; however, it would be significant at the .10 level.

The distribution of expenditures per student in the States is positively skewed. The mean expenditure under this Title was \$25.66. However the two highest States were \$135 (ranked 47th in per capita income) and \$133; while all others were below \$66.

The correlation between State enrollment and allocations to States is positive,  $r = 0.7179$ . That value is significant at the .05 level.

The Title specified an objective formula, which is different for community colleges and technical institutes than for other institutions of higher education. For community colleges and technical institutes the formula is based on two factors: (1) the number of high school graduates of the State, and (2) the State's allotment ratio. The allotment ratio was set at 1.00 less the product of (A) .50 and (B) the quotient obtained by dividing the income per person for the State by the income per person for all States. The Commission is to allot to each State for each fiscal year an amount which bears the same ratio to the funds being allocated as the product of (1) and (2) as given above, except that the ratio in no case shall be less than  $33 \frac{1}{3}$  or more than  $66 \frac{2}{3}$ . Thus, at least up to the limits prescribed, the higher the portion of the population graduating from high school or the lower the per capita income, the greater would be the share of a particular state.

Since the States with lower per capita income also tend to have lower portions of the age group graduating from high school their share is less than it would be if the formula were based on the age group. A factor of number in the age group rather than number graduating from high school would tend to equalize more than the present formula.

#### Vocational Education Act of 1963

In 1971, \$61,188,766 was allotted to the States under the Vocational Education Act of 1963, to community colleges and technical institutes. The mean allocation was \$1,200,000. Forty-seven states participated under this Title in that year.

The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e4}$ , is negative;  $r = 0.4063$ , which is significant. The null hypothesis of no correlation is rejected and an inverse (equalizing) relation is inferred.

The correlation between State enrollment and allocations to States is positive;  $r = 0.2117$ . That is not significant and the null hypothesis of no relation is retained. This is one of two out of ten programs in which the relation is not both positive and significant for State enrollment and allocations to States. Those same two are significant for equalizing on per capita income.

The Act specified a formula for allocating forthcoming appropriations to the States. The factors established were (1) an allotment ratio determined by per capita income (equalizing) and (2) the number of individuals in the

target populations. The portion for any State would be fixed by the same ratio to the funds appropriated as the ratio of the product of the States allotment ratio times the population in its target group would bear to the sum of all such products. The age groups were fixed with a lower portion going to higher age groups. The effect apparently has been to equalize resources available for such education programs and to distribute opportunity for such training, to some extent at least, over a wider age distribution.

#### Education Professions Development Act

For community colleges \$1,453,198 was allotted to States under the Education Professions Development Act in 1971, with a mean allotment of \$28,600. A rather small portion, less than 5 percent, of total allotments under this Act were allotted to community colleges.

The correlation between per capita income and allocations per student enrolled,  $y$  and  $X_{e1}$ , is positive,  $r = 0.0667$ . The value is not significant at the .05 level. This Act and Title I of the Higher Education Act were the only two correlations of income and per student allotment with positive signs. Neither is significant at the .05 level.

The correlation between State enrollment and allocations to State is positive,  $r = 0.5353$  which is significant at the .05 level.

The Commissioner was authorized by this Act to enter into agreements with institutions as he determines necessary. Thus there is no objective formula to allocate according to income or enrollment.

#### Manpower Development and Training Act

For community colleges \$8,319,381 was allotted to the States in 1971 under the Manpower Development Training Act. The mean allotment was \$161,234.

The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e6}$ , is negative,  $r = 0.1039$ . That is not significant at the .05 level.

The correlation between State enrollment and allocations to the States is positive,  $r = 0.8349$ . That is significant at the .05 level. The null hypothesis of no relation is rejected and a direct (positive) relation is inferred.

The Act did not specify an objective formula, for apportionment of benefits. The Secretary of Labor was charged with making allotments based on guidelines of unemployment, employment and unemployment compensation in the individual States.

#### Nurse Training Act of 1964, Special Projects Grants, as Amended by the Allied Health Professions Act

Grants to community colleges under the Nurses Training Act, as amended, in 1971 came to a total of \$2,069,956. The mean State allocation was \$38,142.

The correlation between per capita income and allocations per student enrolled,  $Y$  and  $X_{e7}$ , is negative,  $r = 0.0292$ . That value is not significant at the .05 level. Again the distribution of allotments per student was positively skewed with a few States receiving relatively great amounts per student. The highest allotment per student enrolled \$20.40, the mean was \$2.53 and the standard deviation \$5.10.

The correlation between State enrollment and allocations to the States is positive. For the correlation of  $E$  and  $X_{s7}$ ,  $r = 0.3796$ . That is significant at the .05 level.

While student aid under this Act is to be allotted on an objective formula special project grants are not. These grants are made to contribute toward the provision, maintenance or improvement of a specialized function which a center provides. Thus the correlation score indicating a near zero relation, that is no relation to income, can be expected. The correlation may be expected to be low as there were only 24 States which participated in that year, while there were 47 States in both Nursing Student Loan program and the Nursing Scholarships program.

Nurse Training Act of 1964, Nursing Student Loans,  
as Amended by the Allied Health Professions Act

In 1971, \$4,128,969 was allotted among the States in order to capitalize student loan funds for institutions



within the States. The mean allotment for the States was \$79,497. The funds were intended for the institutions to establish revolving funds from which students could obtain loans.

The correlation between per capita income and allocations per student enrolled,  $Y$  and  $X_{eg}$ , is negative. For  $Y$  and  $X_{eg}$ ,  $r = 0.1906$ , which is not significant at the .05 level.

The correlation between State enrollment and allocations to the States is positive. For  $E$  and  $X_{sg}$ ,  $r = 0.6655$ . That is significant at the .05 level. The null hypothesis is rejected and a positive relation is inferred.

The factors for allocation among the States are given. There are two: high school enrollment and enrollment in schools of nursing.

#### Nurse Training Act of 1964, Nursing Scholarships

In 1971 there was allotted to the States a total of \$4,646,186. The mean was \$89,523. The States in turn allotted funds to institutions in the States in order for them to offer scholarships.

The correlation between per capita income and allocations per student enrolled is negative. For  $Y$  and  $X_{eg}$ ,  $r = 0.1777$ . That is not significant at the .05 level, and the null hypothesis of no relation is not rejected. Again the distribution of allotments per student enrolled is positively skewed. The highest allotment per student

enrolled to a State was \$28.50. The next three were \$22.50 and two at \$15.30 while all others were under \$10.00. The mean was \$4.00 with a standard deviation of \$5.66 which indicates a smaller distribution below the mean.

The correlation between State enrollment and allocations to the States is positive. For  $E$  and  $X_{s9}$ ,  $r = 0.6608$ , which is positive at the .05 level and the null hypothesis of no relation is not rejected.

#### Allied Health Professions Act, Basic Improvement Grants

A total of \$1,732,277 was allotted to the States in 1971 under the Allied Health Professions Act. The mean was \$33,966.

The correlation between per capita income and allocations per student enrolled,  $Y$  and  $X_{e10}$ , is negative. For  $Y$  and  $X_{e10}$ ,  $r = 0.1403$  which is not significant at the .05 level. The null hypothesis of no relation is not rejected.

The correlation between State enrollment and allocations to the States is positive. For  $E$  and  $X_{s10}$ ,  $r = 0.9667$  which is significant at the .05 level. The null hypothesis of no relation is rejected, and a positive relation is inferred.

The Act specified an objective formula for allocations. The Surgeon General was authorized to determine the amount for each institution on a formula of two factors. The

factors are (1) the product of \$5,000 times the number of curricula specified in the Act, plus (2) the product of \$500 times the number of full time students in each institution.

Higher Education Act of 1965, Title IV--  
Educational Opportunity Grants

The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e11}$ , is negative,  $r = 0.0720$ . That value is not significant at the .05 level. The null hypothesis of no relation is retained.

The correlation between State enrollment and allocations to States for  $E$  and  $X_{s11}$  is positive,  $r = 0.9371$ . This is significant at the .05 level. The null hypothesis of no relation is not retained, and the sign infers a positive relation.

Higher Education Act of 1965, Title IV--  
Work Study Grants

The correlation between per capita income and allocation per student enrolled,  $Y$  and  $X_{e12}$ , is negative,  $r = 0.0050$ . The null hypothesis of no relation is retained.

The correlation between State enrollment and allocations to States is positive,  $r = 0.7117$ , and is significant at the .05 level. The null hypothesis of no relation is not retained and the sign infers a positive relation.

## **CHAPTER V**

### **SUMMARY, CONCLUSIONS AND IMPLICATIONS**

The focus of the study was upon the basis for allotment of Federal aid to the States under twelve Federal programs of aid to community colleges. The allotments by State were examined for each program to determine whether the impact of Federal allotments equalized (had an inverse relation to income) or disequalized (had a direct relation to income) the financial capacity of the States to support community college level education. An examination also was made to determine whether a relationship exists between Federal allotments and statewide enrollments.

#### **Programs studied:**

Higher Education Act of 1965, Title I--Community Service and Continuing Education Program.

Higher Education Act of 1965, Title III--Strengthening Developing Institutions.

Higher Education Facilities Act of 1963, Title I.

Vocational Education Act of 1963.

Education Professions Development Act, Title V-E--Training Institutes.

Manpower Development Training Act.

Nurse Training Act of 1964--Special Project Grants, Nursing Student Loans and Nursing Scholarships.

Allied Health Professions Act--Basic Improvement Grants.

Higher Education Act of 1965, Title IV--Educational Opportunity Grants and Work Study Grants.

State per capita income was used as an indicator of relative financial capacity. Equalization of financial capacity, in this study, is a provision in a Federal aid program which gives some statutory recognition to underlying differences in relative capacities to raise funds for such a program as that for which the aid is being provided in order to achieve a more uniform level of support across the States.

An equalizing relation in this study, is an inverse relation between a selected indicator of financial ability to support community college education and the relative level of allocation among the States from a Federal aid program. The indicator most frequently used in the legislation examined in this study was state per capita income.

In Chapter II, the history of Federal aid to higher education was briefly surveyed. The literature was reviewed to show the author's perception of the change which has occurred in the rationale for, and the national interest in, providing Federal aid to higher education. Special emphasis was placed on the development of the present rationales for Federal subsidy, equalization of opportunity and the role of the community college in respect to the national interest.

In Chapter III, the intent, provisions and allocation formulas of the respective aid programs included in this study were presented. The intent of the chapter was to provide information concerning the legislative intent of the specific programs under consideration.

In Chapter IV, data were presented, analyzed and discussed relative to the equalizing tendencies of the program allocations, and the relationship of allocations to statewide enrollments. Allocation data were considered for the fiscal years 1969, 1970 and 1971. As the ranking and ratios among the States was determined to be consistent from year to year, allocations for fiscal 1971 only were used in the correlation analysis. Enrollment data were for October, 1971, as adjusted and reported by the American Association of Community and Junior Colleges in 1972. Data for allocations were received directly from the United States Office of Education. State per capita income data were from the Survey of Current Business. The data for each program were analyzed to determine whether or not there are equalizing tendencies and whether or not the level of allocations are related to the level of enrollment.

### Conclusions

This study posed questions at the community college level similar to those the National Education Finance Project of Edgar Bedenbaugh (referred to in the Introduction to this study) posed at the elementary and secondary level.

Bedenbaugh concluded that, in ten programs of Federal aid to elementary and secondary school, there is an overall inverse relation, but it would not seem sufficiently significant to warrant being described as equalizing. He found the equalizing impact is not consistent, in that programs equalize for some states and disequalize for others. And he noted that legislation generally did not provide specifically for equalization of the capacity to support education among the States.

The conclusions of this study are very similar for Federal aid programs to community colleges. Those conclusions are discussed in the following sections.

#### Common Intent Among Programs of Aid to Community Colleges

The most commonly expressed intents in the programs of Federal aid considered in this study were extension of opportunity for higher education and improvement of quality. The intent to extend opportunity for post-secondary education was addressed both to extending opportunity to a larger segment of the population generally and to extending opportunity to specific segments of the population.

The intent of programs to improve quality was also common among the programs. The Higher Education Facilities Act, Developing Institutions Grants, Nurse Construction Grants, Nurse Special Projects Grants and construction loan programs, among others, were intended to improve the quality of instruction, either through improvement of

facilities or instruction. The thrust of the programs for improvement of facilities and curricula, under which community colleges participated substantially, has generally been to improve the quality of post-secondary education across the whole population and across a wide distribution of institutions, rather than providing exemplary demonstrations in institutions in which enrollment would be restricted.

#### Factors Determining Allocations

The basis for determining the amount of allotments to the States varies among the Federal programs. Factors which specifically determine allotments inversely to per capita income are included in only two programs. Under the Higher Education Facilities Act, Title I, allotments to States for community colleges are based upon per capita income and number of high school graduates. The Vocational Education Act of 1963 is based upon State per capita income and number in the target population, which is the number determined to require training in order to secure or maintain appropriate employment. In those two cases the less the per capita income in the State or the greater the number in the target population, the greater the allotment.

Several programs are based on the number in the total population or target populations. State allotments for Community Service Grants are determined by the sum of a base grant for each and a share of the remaining



appropriation proportional to its share of the national population. State allotments for Nurse Traineeships and Nursing Construction Loans are based on the number of high school graduates and the number enrolled in nursing programs. And the Manpower Development Training Act determines allotment on the ratio of unemployment in a State to that of the Nation.

Several programs have criteria for eligibility of students and specified amounts for awards. In those cases the rate of participation by students determines the allotment to any state. This is true for the Higher Education Act Opportunity and Work Study Grants and Nurse Opportunity Grants. The greater the number participating, the greater the Federal allotment, and also the greater the amount of matching required of a State.

Some program allotments are determined by the distribution of the institutions across the Nation. Under the Education Professions Development Act and the Developing Institutions Grants of the Higher Education Act the distribution of institutions designated by the Commissioner of Education and the magnitude of the programs in those institutions determines the allotment for any state.

#### Equalization of Federal Aid Programs to Community Colleges

The correlations between per capita income and allocations per community college student are given in Table I of Chapter IV. In ten of the twelve programs

examined the sign is negative which infers an inverse (equalizing) relationship. However in only two cases are the values significant. Those are Title III of the Higher Education Act, Strengthening Developing Institutions, and the Vocational Education Act of 1963.

In only two cases are the signs positive (disequalizing). Those are Title I of the Higher Education Act, Community Services and Continuing Education Programs, and Title V-E of the Higher Education Professions Act, Training Institutes.

Thus the relationship between per capita income and Federal program allocation per community college student appears to be equalizing as the sign is negative in ten of twelve programs. However the values are significant at the .05 level in only two cases. Thus the overall equalizing tendencies are very slight.

#### The Relationship Between Allotments and Enrollment

The coefficients between enrollment by state and allotment by state for community colleges in each of the selected programs are shown in Table II, Chapter IV. The sign is positive in every case which infers a consistent direct relation. In ten of the twelve cases the value at the .05 level is significant. In those cases the null hypothesis of no relationship is not retained and a direct relation is inferred.

The two cases, of twelve, which are not significant are Title III of the Higher Education Act, Strengthening

Developing Institutions and the Vocational Education Act of 1963. Those are the same two cases in which the relationship between Federal allocations per student enrolled in community colleges and per capita income by state is significant and inverse (equalizing).

### Implications

The policies and means which are best suited derive from the goals from which one starts. If one assumes that the allocation of Federal funds should be used to achieve equalization of capacities to support higher education, then the allotments must bear an inverse relation to the capacity. To that end the Federal aid programs studied in this paper appear consistently but very minimally to equalize.

It consistently appears that categorical aid, a problem centered approach, does not usually lend itself to reducing the underlying differences in the relative abilities of the States. Thus a better solution to achieve equalization, or movement toward equalization, may be found in more general assistance.

In order to compensate the States for their respective efforts and to encourage increasing enrollments, enrollment should also be a factor in the formula upon which Federal allotments to the States are determined. To equalize the capacities of the States, or the relative effort with which

such education is provided, requires, in addition, that adjustment be made to cause allotments to be greater as per capita income is less.

Further study, especially examination of the distribution of Federal funds within the States is recommended. The assumption of similar income distributions in the State enrollments must be tested. In order to determine whether allotments which equalize among States in fact equalize among persons, it is necessary to determine and compare the distribution of family incomes in the respective state enrollments.

## **APPENDICES**

**APPENDIX A**

**FEDERAL FUNDS OBLIGATED TO COMMUNITY COLLEGES, BY STATE**

# HIGHER EDUCATION ACT, TITLE I

	FY 1969	FY 1970	FY 1971
<b>TOTALS</b>	<b>578,266</b>	<b>877,705</b>	<b>835,744</b>
1. Alabama	---	5,000	8,000
2. Alaska	28,985	---	---
3. Arizona	---	20,000	38,000
4. Arkansas	18,365	11,440	10,000
5. California	127,574	26,677	20,136
6. Colorado	5,110	48,570	62,000
7. Connecticut	9,500	94,257	51,341
8. Delaware	5,309	20,100	20,100
9. District of Columbia	---	---	---
10. Florida	42,500	92,934	41,136
11. Georgia	18,108	9,645	3,300
12. Hawaii	---	---	---
13. Idaho	---	---	---
14. Illinois	34,000	199,934	85,000
15. Indiana	---	---	22,400
16. Iowa	---	---	6,156
17. Kansas	---	---	---
18. Kentucky	---	---	---
19. Louisiana	---	---	---
20. Maine	---	---	---
21. Maryland	17,046	50,725	---
22. Massachusetts	19,000	66,240	35,000
23. Michigan	34,348	27,886	90,880
24. Minnesota	---	5,005	3,500
25. Mississippi	---	---	24,480
26. Missouri	---	6,650	---
27. Montana	---	---	---
28. Nebraska	---	---	---
29. Nevada	---	---	---
30. New Hampshire	---	---	1,200

	FY 1969	FY 1970	FY 1971
31. New Jersey	30,000	35,246	---
32. New Mexico	---	---	---
33. New York	---	17,780	129,000
34. North Carolina	---	14,119	---
35. North Dakota	---	---	---
36. Ohio	48,064	---	---
37. Oklahoma	12,787	11,362	14,264
38. Oregon	---	---	44,193
39. Pennsylvania	35,738	79,571	47,840
40. Rhode Island	25,000	---	12,000
41. South Carolina	---	---	---
42. South Dakota	---	---	---
43. Tennessee	5,800	---	---
44. Texas	14,901	---	14,000
45. Utah	---	---	---
46. Vermont	660	---	9,018
47. Virginia	31,464	19,394	25,968
48. Washington	14,007	3,000	16,472
49. West Virginia	---	---	---
50. Wisconsin	---	---	---
51. Wyoming	---	---	---
52. American Samoa	---	---	---
53. Guam	---	---	---
54. Puerto Rico	---	---	---
55. Trust Territory	---	---	---
56. Virgin Islands	---	12,170	---

Source: U. S. Office of Education.



**HIGHER EDUCATION ACT:  
STRENGTHENING DEVELOPING INSTITUTIONS**

	FY 1969	FY 1970	FY 1971
<b>TOTALS</b>	<b>6,935,000</b>	<b>7,054,000</b>	<b>7,785,500</b>
10. Alabama	170,000	511,000	583,000
11. Alaska			
12. Arizona			
13. Arkansas		71,300	100,000
14. California	225,000	250,000	353,000
15. Colorado	50,000	100,000	150,000
16. Connecticut		43,066	134,000
17. Delaware			
18. District of Columbia			
19. Florida	245,000	175,000	287,400
20. Georgia	566,955	476,798	580,000
21. Hawaii	140,000	200,000	175,000
22. Idaho			
23. Illinois	380,000	449,648	474,666
24. Indiana	89,187	99,932	
25. Iowa	168,805	196,825	213,300
26. Kansas	96,687	138,898	102,220
27. Kentucky	475,000	425,000	400,000
28. Louisiana			113,000
29. Maine			
30. Maryland	229,322	80,000	115,000
31. Massachusetts	50,000	79,643	
32. Michigan	90,000		
33. Minnesota	80,000		
34. Mississippi	926,800	1,091,589	947,000
35. Missouri	142,000	72,000	100,000
36. Montana	21,300		
37. Nebraska			
38. Nevada			

	FY 1969	FY 1970	FY 1971
39. New Hampshire			
40. New Jersey	50,000		107,321
41. New Mexico			
42. New York	25,000		
43. North Carolina	513,173	752,992	783,000
44. North Dakota	190,000	130,000	125,000
45. Ohio	50,000	53,046	
46. Oklahoma	475,000	494,000	325,000
47. Oregon			
48. Pennsylvania			
49. Rhode Island	37,000		
50. South Carolina	60,000		176,094
51. South Dakota			
52. Tennessee	277,184	223,264	150,000
53. Texas	459,387	485,799	698,000
54. Utah	42,600		119,100
55. Vermont			
56. Virginia	85,000	99,200	139,399
57. Washington	220,000	180,000	160,000
58. West Virginia			
59. Wisconsin			
60. Wyoming	42,600		
61. U. S. Service Schools			
62. Canal Zone			
63. Guam			
64. Puerto Rico	175,000	175,000	175,000
65. Virgin Islands	85,000		

Source: U. S. Office of Education.

## HIGHER EDUCATION ACT: PERSONNEL DEVELOPMENT

	FY 1969	FY 1970	FY 1971
<b>TOTALS</b>			
10. Alabama			
11. Alaska			
12. Arizona	184,700	406,713	328,321
13. Arkansas			
14. California	213,267	64,698	33,702
15. Colorado			
16. Connecticut			
17. Delaware			
18. District of Columbia	10,000	64,910	94,906
19. Florida			
20. Georgia			
21. Hawaii			
22. Idaho			
23. Illinois			
24. Indiana			
25. Iowa	244,180	55,078	37,610
26. Kansas			
27. Kentucky			
28. Louisiana			
29. Maine			
30. Maryland			
31. Massachusetts	64,308		
32. Michigan		22,964	27,847
33. Minnesota			
34. Mississippi			
35. Missouri		59,941	54,972
36. Montana			
37. Nebraska			
38. Nevada			
39. New Hampshire			

	FY 1969	FY 1970	FY 1971
40. New Jersey		70,237	
41. New Mexico			
42. New York	84,878	95,475	
43. North Carolina			
44. North Dakota			
45. Ohio			
46. Oklahoma			
47. Oregon			
48. Pennsylvania			
49. Rhode Island			
50. South Carolina			
51. South Dakota			
52. Tennessee			
53. Texas		111,697	122,265
54. Utah			
55. Vermont			
56. Virginia		77,477	96,189
57. Washington	20,036	22,544	
58. West Virginia			
59. Wisconsin			
60. Wyoming			
61. U. S. Service Schools			
62. Canal Zone			
63. Guam			
64. Puerto Rico			
65. Virgin Islands			

Source: U. S. Office of Education.

## HIGHER EDUCATION FACILITIES ACT, TITLE I

	FY 1969	FY 1970	FY 1971
<b>TOTALS</b>	<b>75,470,521</b>	<b>40,365,372</b>	<b>40,769,408</b>
10. Alabama	679,637	994,972	979,584
11. Alaska	-o-	-o-	50,000
12. Arizona	807,119	388,282	430,224
13. Arkansas	-o-	459,141	97,736
14. California	6,699,777	3,211,049	3,369,174
15. Colorado	940,502	493,581	505,432
16. Connecticut	707,988	436,967	455,603
17. Delaware	75,582	-o-	96,399
18. District of Columbia	-o-	-o-	-o-
19. Florida	2,312,667	1,293,421	1,245,650
20. Georgia	2,044,455	1,095,526	804,532
21. Hawaii	327,314	171,585	160,870
22. Idaho	400,064	210,209	209,632
23. Illinois	3,311,412	1,694,867	1,731,891
24. Indiana	2,044,962	1,051,311	1,091,187
25. Iowa	1,383,909	734,682	765,821
26. Kansas	1,051,377	562,089	551,074
27. Kentucky	1,338,963	584,841	743,337
28. Louisiana	306,071	904,989	973,738
29. Maine	548,214	-o-	285,121
30. Maryland	1,346,890	691,630	669,591
31. Massachusetts	2,157,438	1,076,094	1,001,646
32. Michigan	3,315,772	1,733,216	1,775,561
33. Minnesota	1,824,346	983,409	1,094,957
34. Mississippi	1,197,927	653,093	642,105
35. Missouri	1,972,556	945,265	924,331
36. Montana	234,428	-o-	-o-
37. Nebraska	726,890	356,265	378,764
38. Nevada	-o-	-o-	68,519

	FY 1969	FY 1970	FY 1971
39. New Hampshire	-0-	76,419	-0-
40. New Jersey	2,260,985	1,193,927	1,215,325
41. New Mexico	-0-	132,300	-0-
42. New York	5,110,882	2,957,027	2,871,414
43. North Carolina	2,664,358	1,301,786	1,281,318
44. North Dakota	77,204	46,800	203,758
45. Ohio	5,062,019	2,219,197	2,177,091
46. Oklahoma	1,278,671	677,728	603,363
47. Oregon	978,887	512,143	501,694
48. Pennsylvania	5,381,842	2,701,853	2,703,208
49. Rhode Island	366,701	180,445	184,366
50. South Carolina	1,352,252	750,494	744,237
51. South Dakota	-0-	-0-	-0-
52. Tennessee	1,972,230	960,522	960,979
53. Texas	4,437,818	2,278,572	2,323,488
54. Utah	-0-	305,928	254,072
55. Vermont	208,229	-0-	95,839
56. Virginia	1,908,903	1,019,960	1,330,435
57. Washington	1,372,312	719,018	705,199
58. West Virginia	-0-	96,670	-0-
59. Wisconsin	2,005,041	1,075,884	1,083,149
60. Wyoming	169,890	-0-	90,244
61. U. S. Service Schools	-0-	-0-	-0-
62. Canal Zone	-0-	-0-	-0-
63. Guam	-0-	-0-	-0-
64. Puerto Rico	1,106,037	432,209	337,750
65. Virgin Islands	-0-	-0-	-0-

Source: U. S. Office of Education.

## VOCATIONAL EDUCATION ACT OF 1963

	FY 1970	FY 1971
<b>TOTALS</b>	<b>57,069,108</b>	<b>61,188,766</b>
1. Alabama	---	115,809
2. Alaska	64,724	63,347
3. Arizona	649,601	867,088
4. Arkansas	383,370	431,110
5. California	10,236,672	---
6. Colorado	508,030	1,045,744
7. Connecticut	200,849	354,053
8. Delaware	37,190	2,553
9. District of Columbia	---	---
10. Florida	1,372,144	1,553,613
11. Georgia	5,216	8,934
12. Hawaii	513,436	1,004,109
13. Idaho	705,995	322,241
14. Illinois	2,249,576	2,876,922
15. Indiana	540,252	785,361
16. Iowa	1,190,053	2,244,249
17. Kansas	394,630	475,577
18. Kentucky	32,500	91,000
19. Louisiana	---	---
20. Maine	375,543	443,993
21. Maryland	1,227,808	1,366,079
22. Massachusetts	16,310	527,925
23. Michigan	2,733,788	3,170,448
24. Minnesota	290,735	515,585
25. Mississippi	2,534,420	2,176,270
26. Missouri	808,632	955,640
27. Montana	63,087	142,208
28. Nebraska	554,528	815,085
29. Nevada	27,130	22,998

	FY 1970	FY 1971
30. New Hampshire	—	12,013
31. New Jersey	440,594	694,530
32. New Mexico	375,744	823,137
33. New York	2,105,529	4,113,889
34. North Carolina	—	4,140,673
35. North Dakota	184,684	242,000
36. Ohio	1,578,868	1,406,308
37. Oklahoma	280,246	912,559
38. Oregon	1,672,275	1,808,387
39. Pennsylvania	2,227,395	3,112,778
40. Rhode Island	70,000	151,534
41. South Carolina	807,608	810,872
42. South Dakota	60,105	18,859
43. Tennessee	1,191,588	1,559,317
44. Texas	9,339,272	8,167,485
45. Utah	595,581	856,933
46. Vermont	—	—
47. Virginia	1,926,664	2,240,445
48. Washington	1,279,405	2,982,079
49. West Virginia	344,624	61,251
50. Wisconsin	3,847,829	4,410,086
51. Wyoming	304,879	266,690
52. American Samoa	—	19,000
53. Guam	—	—
54. Puerto Rico	—	—
55. Trust Territory	—	—
56. Virgin Islands	—	—

Source: U. S. Office of Education.



EDUCATION PROFESSIONS DEVELOPMENT ACT-TITLE V-E,  
TRAINING INSTITUTES

	FY 1969	FY 1970	FY 1971
TOTALS	130,643	905,162	1,453,198
10. Alabama			
11. Alaska			
12. Arizona	50,000		48,373
13. Arkansas			
14. California	24,000	124,000	163,229
15. Colorado			
16. Connecticut			
17. Delaware		22,842	67,802
18. District of Columbia			
19. Florida		15,500	65,092
20. Georgia			
21. Hawaii			
22. Idaho			
23. Illinois		57,989	78,095
24. Indiana			
25. Iowa		37,500	
26. Kansas			37,500
27. Kentucky		61,686	58,455
28. Louisiana		15,600	
29. Maine			
30. Maryland			19,283
31. Massachusetts		8,549	
32. Michigan			
33. Minnesota			28,289
34. Mississippi			19,283
35. Missouri		15,000	
36. Montana			
37. Nebraska			10,000
38. Nevada			

	FY 1969	FY 1970	FY 1971
39. New Hampshire			
40. New Jersey		266,198	256,560
41. New Mexico			
42. New York	56,643	126,643	125,063
43. North Carolina			110,000
44. North Dakota			
45. Ohio			60,000
46. Oklahoma		70,000	50,000
47. Oregon			28,289
48. Pennsylvania			22,207
49. Rhode Island			
50. South Carolina			18,246
51. South Dakota			
52. Tennessee		35,655	50,095
53. Texas			89,337
54. Utah			
55. Vermont			
56. Virginia		48,000	48,000
57. Washington			
58. West Virginia			
59. Wisconsin			
60. Wyoming			
61. U. S. Service Schools			
62. Canal Zone			
63. Guam			
64. Puerto Rico			
65. Virgin Islands			

Source: U. S. Office of Education.

## MANPOWER DEVELOPMENT TRAINING ACT

	FY 1971
<b>TOTALS</b>	<b>8,319,381</b>
1. Alabama	39,193
2. Alaska	121,935
3. Arizona	84,165
4. Arkansas	62,217
5. California	2,588,310
6. Colorado	1,244,167
7. Connecticut	---
8. Delaware	11,971
9. District of Columbia	---
10. Florida	337,404
11. Georgia	---
12. Hawaii	---
13. Idaho	62,977
14. Illinois	366,129
15. Indiana	---
16. Iowa	584,649
17. Kansas	---
18. Kentucky	---
19. Louisiana	44,765
20. Maine	---
21. Maryland	---
22. Massachusetts	13,535
23. Michigan	298,719
24. Minnesota	---
25. Mississippi	217,377
26. Missouri	---
27. Montana	8,675
28. Nebraska	---
29. Nevada	---

	FY 1971
30. New Hampshire	46,206
31. New Jersey	---
32. New Mexico	48,190
33. New York	4,078
34. North Carolina	402,793
35. North Dakota	---
36. Ohio	---
37. Oklahoma	---
38. Oregon	108,816
39. Pennsylvania	31,543
40. Rhode Island	---
41. South Carolina	---
42. South Dakota	29,702
43. Tennessee	---
44. Texas	748,541
45. Utah	97,885
46. Vermont	---
47. Virginia	34,416
48. Washington	412,276
49. West Virginia	---
50. Wisconsin	68,762
51. Wyoming	104,086
52. American Samoa	95,939
53. Guam	---
54. Puerto Rico	---
55. Trust Territory	---
56. Virgin Islands	---

Source: U. S. Office of Education.

## NURSING SPECIAL PROJECT GRANTS

	FY 1969	FY 1970	FY 1971
<b>TOTALS</b>	<b>392,995</b>	<b>902,605</b>	<b>2,069,956</b>
1. Alabama			
2. Alaska			95,082
3. Arizona			
4. Arkansas			73,399
5. California		49,256	165,578
6. Colorado			
7. Connecticut			121,286
8. Delaware		49,262	
9. District of Columbia		134,794	
10. Florida			
11. Georgia			25,408
12. Hawaii	129,743	120,111	137,015
13. Idaho			
14. Illinois			
15. Indiana			44,947
16. Iowa			42,426
17. Kansas			
18. Kentucky			
19. Louisiana			
20. Maine			
21. Maryland			88,461
22. Massachusetts	16,092	20,678	39,829
23. Michigan	116,457	103,953	66,978
24. Minnesota	104,812	89,051	114,697
25. Mississippi	4,200	4,200	6,900
26. Missouri			
27. Montana			
28. Nebraska			180,262
29. Nevada			

	FY 1969	FY 1970	FY 1971
30. New Hampshire			
31. New Jersey		22,472	86,415
32. New Mexico	21,691	33,530	59,858
33. New York		74,942	88,290
34. North Carolina			47,956
35. North Dakota		92,473	129,470
36. Ohio		31,036	
37. Oklahoma			
38. Oregon			22,994
39. Pennsylvania			
40. Rhode Island			
41. South Carolina			
42. South Dakota		3,964	3,690
43. Tennessee			
44. Texas		35,344	128,147
45. Utah			
46. Vermont			
47. Virginia			
48. Washington		37,539	113,351
49. West Virginia			62,798
50. Wisconsin			
51. Wyoming			
52. American Samoa			
53. Guam			
54. Puerto Rico			
55. Trust Territory			
56. Virgin Islands			

Source: U. S. Office of Education.

## NURSING STUDENT LOANS

	FY 1969	FY 1970	FY 1971
TOTALS	1,969,666	2,380,003	4,128,969
1. Alabama	-0-	6,470	26,614
2. Alaska	-0-	-0-	-0-
3. Arizona	19,433	26,974	67,879
4. Arkansas	9,000	35,170	70,157
5. California	189,700	241,181	469,918
6. Colorado	34,380	35,079	57,140
7. Connecticut	10,800	15,789	27,635
8. Delaware	-0-	6,987	9,107
9. District of Columbia	-0-	15,530	26,539
10. Florida	-0-	39,912	138,877
11. Georgia	12,600	77,559	86,915
12. Hawaii	9,000	14,333	10,800
13. Idaho	17,932	22,906	38,941
14. Illinois	10,800	14,400	134,485
15. Indiana	135,727	155,244	174,255
16. Iowa	-0-	9,000	19,000
17. Kansas	31,065	11,257	42,271
18. Kentucky	18,244	73,206	110,461
19. Louisiana	9,000	14,235	18,059
20. Maine	8,500	7,765	10,207
21. Maryland	11,250	5,400	39,323
22. Massachusetts	83,040	52,118	101,249
23. Michigan	47,444	100,657	133,183
24. Minnesota	139,700	88,952	192,744
25. Mississippi	-0-	5,823	15,388
26. Missouri	31,500	41,109	84,212
27. Montana	-0-	9,058	8,637
28. Nebraska	-0-	64,856	23,554
29. Nevada	36,540	14,364	16,330

	FY 1969	FY 1970	FY 1971
30. New Hampshire	-0-	-0-	-0-
31. New Jersey	26,550	87,454	144,795
32. New Mexico	43,200	14,884	24,652
33. New York	481,205	430,753	756,850
34. North Carolina	43,380	40,290	66,849
35. North Dakota	-0-	27,175	41,299
36. Ohio	117,814	86,390	108,943
37. Oklahoma	-0-	15,806	21,919
38. Oregon	11,250	21,351	40,981
39. Pennsylvania	34,650	61,003	117,631
40. Rhode Island	-0-	-0-	-0-
41. South Carolina	17,155	22,322	24,020
42. South Dakota	19,971	25,751	39,570
43. Tennessee	77,436	83,146	149,445
44. Texas	66,875	71,334	94,691
45. Utah	10,800	10,350	13,500
46. Vermont	7,200	23,292	42,919
47. Virginia	16,650	13,050	32,773
48. Washington	13,500	68,501	98,523
49. West Virginia	19,125	13,656	47,104
50. Wisconsin	3,600	7,605	20,661
51. Wyoming	-0-	3,880	13,347
52. American Samoa	-0-	-0-	-0-
53. Guam	-0-	-0-	-0-
54. Puerto Rico	83,250	42,176	70,920
55. Trust Territory	-0-	-0-	-0-
56. Virgin Islands	10,400	4,500	3,697

Source: U. S. Office of Education.



## NURSING SCHOLARSHIP

	FY 1969	FY 1970	FY 1971
TOTALS	1,126,070	2,568,983	4,646,186
1. Alabama	34,000	13,281	38,837
2. Alaska	-0-	-0-	-0-
3. Arizona	20,400	26,097	56,459
4. Arkansas	5,250	35,857	81,931
5. California	98,200	250,392	491,314
6. Colorado	24,000	35,311	66,056
7. Connecticut	8,600	15,842	27,006
8. Delaware	-0-	7,010	9,410
9. District of Columbia	-0-	13,621	27,421
10. Florida	-0-	61,202	154,464
11. Georgia	-0-	63,021	101,107
12. Hawaii	9,600	11,804	10,000
13. Idaho	7,000	22,982	40,239
14. Illinois	9,600	62,879	228,580
15. Indiana	61,470	92,109	185,116
16. Iowa	-0-	10,126	23,095
17. Kansas	9,250	11,295	43,979
18. Kentucky	32,100	81,061	116,575
19. Louisiana	5,100	14,283	10,775
20. Maine	7,000	7,791	6,800
21. Maryland	12,000	34,262	100,046
22. Massachusetts	53,500	42,151	106,488
23. Michigan	24,800	114,108	152,328
24. Minnesota	15,000	94,491	195,838
25. Mississippi	25,000	5,842	14,061
26. Missouri	8,750	40,153	84,121
27. Montana	-0-	9,089	8,924
28. Nebraska	-0-	55,299	21,000
29. Nevada	18,900	14,412	16,875

	FY 1969	FY 1970	FY 1971
30. New Hampshire	-0-	-0-	5,000
31. New Jersey	62,950	132,280	172,083
32. New Mexico	38,000	14,932	25,474
33. New York	227,200	574,191	857,376
34. North Carolina	35,600	56,993	94,446
35. North Dakota	-0-	26,740	37,034
36. Ohio	53,100	87,137	108,747
37. Oklahoma	-0-	16,385	22,048
38. Oregon	4,000	27,675	44,697
39. Pennsylvania	7,900	67,891	126,614
40. Rhode Island	-0-	-0-	-0-
41. South Carolina	6,450	16,016	18,871
42. South Dakota	-0-	18,818	31,226
43. Tennessee	44,700	54,779	141,485
44. Texas	44,600	76,574	181,927
45. Utah	-0-	-0-	-0-
46. Vermont	12,000	20,866	53,870
47. Virginia	7,750	8,828	41,345
48. Washington	16,000	59,757	103,163
49. West Virginia	11,200	12,393	44,074
50. Wisconsin	10,000	6,175	23,481
51. Wyoming	-0-	3,895	13,792
52. American Samoa	-0-	-0-	-0-
53. Guam	-0-	-0-	-0-
54. Puerto Rico	41,800	40,887	71,614
55. Trust Territory	-0-	-0-	-0-
56. Virgin Islands	12,800	-0-	8,924

Source: U. S. Office of Education.

## ALLIED HEALTH PROFESSIONS BASIC IMPROVEMENT GRANTS

	FY 1969	FY 1970	FY 1971
Alabama	34,764	16,537	12,796
Arizona	---	23,671	29,573
California	424,594	452,674	546,526
Colorado	16,406	54,152	30,141
Florida	75,387	79,444	57,723
Idaho	---	---	17,914
Illinois	32,811	93,064	104,357
Iowa	---	9,728	8,531
Maine	23,437	23,996	20,758
Maryland	12,109	40,857	25,307
Massachusetts	---	---	9,099
Michigan	39,061	82,687	103,220
Minnesota	34,764	29,832	34,123
Mississippi	---	16,213	35,544
Missouri	19,140	41,830	48,055
New Hampshire	16,406	---	---
New Jersey	---	24,320	---
New York	445,424	379,390	258,193
North Carolina	40,623	34,372	30,995
North Dakota	---	10,052	9,099
Ohio	---	13,295	18,767
Oregon	40,233	36,642	48,056
Pennsylvania	18,749	16,862	26,160
Puerto Rico	---	---	10,521
South Carolina	13,281	47,667	42,084
Texas	61,716	84,633	103,221
Washington	---	61,286	79,334
Wisconsin	---	---	13,649
Wyoming	---	---	8,531

\$1,348,905      \$1,673,204      \$1,732,277

Source: U.S. Office of Education.

## HIGHER EDUCATION ACT: EDUCATIONAL OPPORTUNITY GRANTS

	FY 1969	FY 1970	FY 1971
Alabama	252,190	166,689	179,600
Alaska	24,360	7,235	6,100
Arizona	226,770	307,261	493,000
Arkansas	37,950	74,209	82,800
California	831,730	1,489,754	3,736,900
Colorado	324,960	382,376	470,600
Connecticut	48,050	162,852	209,200
Delaware	30,720	66,566	99,900
District of Columbia	---	75,868	97,000
Florida	485,660	551,674	960,300
Georgia	231,630	230,122	304,000
Hawaii	---	49,800	91,400
Idaho	27,750	46,066	57,600
Illinois	587,965	726,180	1,709,400
Indiana	67,000	114,248	176,400
Iowa	218,680	261,835	258,200
Kansas	151,580	175,063	233,500
Kentucky	121,610	95,258	120,500
Louisiana	58,250	54,745	50,400
Maine	28,060	36,629	27,100
Maryland	67,070	126,465	251,500
Massachusetts	266,450	357,968	493,300
Michigan	672,140	875,881	1,278,900
Minnesota	191,050	201,684	263,700
Mississippi	355,720	380,162	473,800
Missouri	115,250	128,789	214,400
Montana	---	24,945	55,700
Nebraska	172,550	63,218	94,000
Nevada	---	---	10,000
New Hampshire	2,200	12,544	14,100
New Jersey	293,380	437,889	771,600
New Mexico	16,900	18,682	---
New York	1,805,450	2,408,747	1,381,800

	FY 1969	FY 1970	FY 1971
North Carolina	239,450	263,001	418,400
North Dakota	50,270	43,616	40,800
Ohio	173,750	170,586	216,600
Oklahoma	436,730	434,957	548,900
Oregon	173,490	196,505	352,500
Pennsylvania	246,530	389,932	555,600
Rhode Island	88,170	69,617	71,900
South Carolina	110,000	91,876	144,200
South Dakota	---	---	4,100
Tennessee	450,910	374,465	353,100
Texas	610,660	545,216	992,200
Utah	105,000	126,988	229,400
Vermont	57,840	80,841	66,200
Virginia	55,500	91,909	226,100
Washington	279,630	371,574	502,200
West Virginia	45,520	47,205	58,000
Wisconsin	4,600	52,721	176,000
Wyoming	67,540	80,416	82,000

Source: U.S. Office of Education.

## HIGHER EDUCATION ACT: COLLEGE WORK STUDY GRANTS

	FY 1969	FY 1970	FY 1971
Alabama	788,603	823,942	953,874
Alaska	8,786	15,379	5,674
Arizona	227,155	501,996	504,213
Arkansas	250,367	210,295	352,178
California	3,542,516	3,730,132	6,462,308
Colorado	431,541	553,876	734,446
Connecticut	150,695	248,995	324,377
Delaware	120,880	73,511	100,404
District of Columbia	6,255	225,011	409,064
Florida	1,487,173	2,283,735	2,514,575
Georgia	515,236	718,729	822,339
Hawaii	---	198,189	278,228
Idaho	76,236	58,652	171,205
Illinois	2,652,427	391,011	4,315,395
Indiana	175,692	1,902,680	229,250
Iowa	434,816	675,607	737,898
Kansas	272,685	370,261	388,107
Kentucky	151,525	226,839	482,285
Louisiana	129,490	223,859	139,825
Maine	6,329	30,024	39,726
Maryland	168,675	350,508	556,257
Massachusetts	412,452	541,494	606,104
Michigan	1,214,665	1,417,873	1,873,309
Minnesota	270,160	371,369	665,208
Mississippi	956,145	1,001,479	1,382,750
Missouri	371,218	699,553	899,069
Montana	87,968	138,507	261,039
Nebraska	55,545	93,955	136,715
Nevada	---	6,682	12,181
New Hampshire	5,465	38,079	50,529
New Jersey	401,114	751,785	1,199,050
New Mexico	97,788	46,090	---

	FY 1969	FY 1970	FY 1971
New York	2,775,579	2,788,236	1,684,092
North Carolina	660,047	1,158,125	1,570,353
North Dakota	122,504	119,731	159,620
Ohio	201,660	416,531	497,374
Oklahoma	466,420	548,813	606,341
Oregon	473,148	463,375	673,998
Pennsylvania	860,831	803,908	1,087,526
Rhode Island	4,896	61,182	66,758
South Carolina	291,716	399,097	504,074
South Dakota	6,140	152,881	26,350
Tennessee	316,363	398,571	516,870
Texas	2,194,941	2,528,311	2,662,092
Utah	89,498	81,513	178,604
Vermont	23,147	42,772	45,150
Virginia	253,568	434,509	422,450
Washington	851,692	863,810	1,077,594
West Virginia	86,783	63,040	220,040
Wisconsin	90,917	255,838	415,713
Wyoming	141,153	225,848	191,598

Source: U.S. Office of Education.

**APPENDIX B**

**ADVISORY COMMISSIONS ON HIGHER EDUCATION**



PRESIDENT'S COMMISSION ON HIGHER EDUCATION  
1947

George F. Zook, Chairman

Sarah G. Blanding

O. C. Carmichael

Arthur H. Compton

Henry A. Dixon

Milton S. Eisenhower

John R. Emens

Alvin C. Eurich

Douglas S. Freeman

Algo D. Henderson

Msgr. Frederick G. Hochwalt

Lewis W. Jones

Horace M. Kallen

Fred J. Kelly

Murray D. Lincoln

T. R. McConnell

Earl J. McGrath

Martin R. P. McGuire

Agnes Meyer (Mrs. Eugene)

Harry K. Newburn

Bishop G. Bromley Oxnam

F. D. Patterson

Mark Starr

George D. Stoddard

Harold H. Swift

Ordway Tead

Goodrich C. White

Rabbi Stephen S. Wise

THE PRESIDENT'S COMMITTEE ON EDUCATION BEYOND  
THE HIGH SCHOOL  
1957

DEVEREUX C. JOSEPHS, Chairman,  
Chairman of Board, New York  
Life Insurance Co.

DAVID D. HENRY, Vice Chairman,  
President, University of  
Illinois.

ALBERT F. ARNASON, Commissioner,  
North Dakota Board of Higher  
Education.

GEORGE P. BERRY, Dean, Harvard  
Medical School.

LAWRENCE L. BETHEL, President,  
Fashion Institute of  
Technology.

HORACE M. BOND, President,  
Lincoln University.

SYDNEY P. BROWN, Attorney,  
Member, Chicago Board of  
Education.

SAMUEL MILLER BROWNELL,  
Superintendent, Detroit  
Public Schools.

HAROLD C. CASE, President,  
Boston University.

DOROTHY BUFFUM CHANDLER,  
Assistant to the President,  
Times-Mirror Co., Los  
Angeles.

CATHERINE B. CLEARY, Vice  
President, First  
Wisconsin Trust Co.

JOHN D. CONNORS, Director,  
AFL-CIO Department of  
Education.

ARTHUR G. COONS, President,  
Occidental College.

J. BROWARD CULPEPPER,  
Executive Director,  
Board of Control of  
Florida Institutions of  
Higher Learning.

ARTHUR HOLLIS EDENS,  
President, Duke  
University.

CRAWFORD H. GRENEWALT,  
President, E. I. du Pont  
de Nemours & Co., Inc.

LEO A. HOEGH, Former  
Governor of Iowa.

FREDERICK L. HOYDE,  
President, Purdue  
University.

ROBERT R. HUDELSON, Former  
Dean, College of  
Agriculture, University  
of Illinois.

RESS H. HUGHES, President  
Kansas State Teachers  
College.

SEYMOUR H. KNOX, Chairman  
of Board, Marine Trust  
Company of Western  
New York.

ROY E. LARSEN, President,  
Time, Inc.

KATHERINE E. McBRIDE,  
President, Bryn Mawr  
College.

JAMES MCKINNEY, Chairman  
of Board, American School.

JAMES LEWIS MORRILL,  
President, University of  
Minnesota.

KENNETH E. OBERHOLTZER,  
Superintendent, Denver  
Public Schools.

HOWARD C. PETERSEN, President,  
Fidelity-Philadelphia Trust  
Co.

PAUL C. REINERT, S. J.,  
President, Saint Louis  
University.

DEAN M. SCHWEICKHARD,  
Commissioner of Education,  
State of Minnesota.

EDGAR W. SMITH, Chairman,  
Governor's Committee on  
Higher Education in  
Oregon.

EDGAR B. STERN, Trustee,  
Tulane University.

ANNA LORD STRAUSS, Past  
National President,  
League of Women Voters.

LAURENCE F. WHITEMORE,  
Chairman of Board,  
Brown Co.

THEODORE O. YNTEMA,  
Vice President,  
Ford Motor Co.

THE EDUCATIONAL POLICIES COMMISSION  
1964

Of the National Education Association of the United States  
and the American Association of School Administrators

ARTHUR F. COREY, Chairman

MARGARET LINDSEY, Vice-Chairman

ROBERTA S. BARNES

GEORGE B. BRAIN

SAMUEL M. BROWNELL

NATT B. BURBANK

WILLIAM G. CARR

FORREST E. CONNER

J. W. EDGAR

WENDELL GODWIN

CLARICE KLINE

RACHEL R. KNUTSON

MAX LERNER

JAMES D. LOGSDON

JAMES W. REYNOLDS

LINA SARTOR

H. E. TATE

O. MEREDITH WILSON

ROBERT H. WYATT

PRESIDENT'S TASK FORCE ON PRIORITIES IN HIGHER EDUCATION  
1970

JAMES M. HESTER, Chairman  
President, New York University  
New York, New York

GEORGE F. BUDD  
President, Kansas State College  
Pittsburg, Kansas

JAMES C. FLETCHER  
President, University of Utah  
Salt Lake City, Utah

LUTHER H. FOSTER  
President, Tuskegee Institute  
Tuskegee Institute, Alabama

G. ALEXANDER HEARD  
Chancellor, Vanderbilt  
University  
Nashville, Tennessee

JOHN A. HOWARD  
President, Rockford College  
Rockford, Illinois

HOWARD W. JOHNSON  
President  
Massachusetts Institute of  
Technology  
Cambridge, Massachusetts

EDWARD H. LEVI  
President, University of Chicago  
Chicago, Illinois

SEBASTIAN V. MARTORANA  
Vice Chancellor for 2-Year  
Colleges, State University  
of New York  
Albany, New York

NEIL H. McELROY  
Chairman of the Board  
The Procter & Gamble  
Company  
Cincinnati, Ohio

MALCOLM C. MOOS  
President, University of  
Minnesota  
Minneapolis, Minnesota

ALBERT L. NICKERSON  
Director, Mobil Oil  
Corporation  
New York, New York

ROSEMARY PARK  
Vice Chancellor for Student  
and Curricular Affairs,  
University of California  
at Los Angeles  
Los Angeles, California

JOHN E. SAWYER  
President, Williams  
College  
Williamstown, Massachusetts

PAUL E. WALDSCHMIDT  
President, University of  
Portland  
Portland, Oregon

JOHN C. WEAVER  
President, University of  
Missouri  
Columbia, Missouri

**APPENDIX C**

**STATE ENROLLMENTS IN COMMUNITY COLLEGES, OCTOBER, 1971**

# APPENDIX C

## STATE ENROLLMENTS IN COMMUNITY COLLEGES, OCTOBER, 1971

	Enrollment in Public Community Colleges	Enrollment in Public and Private Community Colleges
Alabama	24967	26887
Alaska	6919	7169
Arizona	45233	45329
Arkansas	3602	4914
California	762508	763480
Colorado	29506	29506
Connecticut	24619	28399
Delaware	4788	7487
District of Columbia	3042	3447
Florida	120809	123742
Georgia	25249	28564
Hawaii	16181	16181
Idaho	4168	9406
Illinois	173265	180373
Indiana	10477	10942
Iowa	21895	24993
Kansas	20526	22193
Kentucky	13104	14759
Louisiana	9106	9194
Maine	2885	3379
Maryland	50361	51026
Massachusetts	31575	43678
Michigan	129539	131975
Minnesota	22688	23962
Mississippi	23715	25335
Missouri	38065	40272
Montana	2184	2184
Nebraska	10392	10735
Nevada	1631	1631

	Enrollment in Public Community Colleges	Enrollment in Public and Private Community Colleges
New Hampshire	547	1668
New Jersey	49645	55695
New Mexico	5257	5257
New York	209122	216745
North Carolina	53193	61249
North Dakota	6973	6973
Ohio	63468	64039
Oklahoma	17727	20281
Oregon	55018	55170
Pennsylvania	69221	84940
Rhode Island	3043	5207
South Carolina	20812	24707
South Dakota		416
Tennessee	11622	14400
Texas	122723	129799
Utah	9305	9305
Vermont	454	2498
Virginia	36538	39683
Washington	89493	89493
West Virginia	4421	5896
Wisconsin	67188	68806
Wyoming	7080	7080
American Samoa	744	744
Canal Zone	1310	1310
Puerto Rico	4998	18259
<b>TOTAL</b>	<b>2543901</b>	<b>2680762</b>

Source: American Association of Junior Colleges, 1971 Junior College Directory. (One Dupont Circle, Washington D. C.: Published by the American Association of Junior Colleges and the ERIC Clearinghouse, 1971.)



**APPENDIX D**

**PER CAPITA PERSONAL INCOME, 1971**

# PER CAPITA PERSONAL INCOME, 1971

State	Per Capita Personal Income	Rank
Alabama	\$3,087	49
Alaska	4,875	4
Arizona	3,913	27
Arkansas	3,078	50
California	4,640	10
Colorado	4,153	16
Connecticut	4,995	3
Delaware	4,673	9
District of Columbia	5,870	1
Florida	3,930	25
Georgia	3,599	35
Hawaii	4,738	8
Idaho	3,409	41
Illinois	4,775	7
Indiana	4,027	22
Iowa	3,877	30
Kansas	4,192	14
Kentucky	3,306	44
Louisiana	3,252	47
Maine	3,377	42
Maryland	4,522	12
Massachusetts	4,562	11
Michigan	4,430	13
Minnesota	4,032	20
Mississippi	2,788	51
Missouri	3,940	24
Montana	3,629	34
Nebraska	4,030	21
Nevada	4,822	5
New Hampshire	3,796	31

State	Per Capita Personal Income	Rank
New Jersey	4,811	6
New Mexico	3,298	45
New York	5,000	2
North Carolina	3,424	40
North Dakota	3,538	36
Ohio	4,175	15
Oklahoma	3,515	37
Oregon	3,959	23
Pennsylvania	4,147	17
Rhode Island	4,126	19
South Carolina	3,142	48
South Dakota	3,441	39
Tennessee	3,300	43
Texas	3,726	32
Utah	3,442	38
Vermont	3,638	33
Virginia	3,899	29
Washington	4,132	18
West Virginia	3,275	46
Wisconsin	3,912	28
Wyoming	3,929	26

## BIBLIOGRAPHY

- Advisory Commission on Intergovernmental Relations. The Role of Equalization in Federal Grants. Washington, D. C.: U. S. Government Printing Office, 1964.
- Alexander, K. and Jordan, F. Constitutional Reform of School Finance. Gainesville, Florida: National Education Finance Project, November, 1972.
- American Association of Junior and Community Colleges. Junior College Directory (1969, 1970, 1971, 1972). Washington, D. C.: American Association of Junior Colleges and the ERIC Clearinghouse for Junior Colleges, 1971.
- Ashworth, Kenneth H. Scholars and Statesmen. San Francisco: Jossey-Bass, Inc., 1972.
- Axt, Richard G. The Federal Government and Financing Higher Education. New York: Columbia University Press, 1952.
- Babbidge, Homer D. and Rosenzweig, Robert M. The Federal Interest in Higher Education. New York: McGraw-Hill Book Co., 1962.
- Bedenbaugh, Edgar H. Extent of Financial Equalization Among the States from Ten Programs of Federal Aid to Education. Doctoral dissertation, Gainesville, Florida: University of Florida, 1970.
- Bennion, John W. The Formation of Federal Educational Policy in the Elementary and Secondary Education Act of 1965. Doctoral dissertation, The Ohio State University, 1966.
- Berke, Joel S. and Kirst, Michael W. Federal Aid to Education Who Benefits? Who Governs? Lexington, Mass.: Lexington Books, 1972.
- Brown, Howard R. "Financing the Aims of American Higher Education," in Financing Higher Education: Alternatives for the Federal Government. Ed. Mel Orwig. Iowa City, Iowa: The American College Testing Program, 1971.

Campbell, Ronald F. and Boud, William F. "Federal Support of Higher Education: Elitism Versus Egalitarianism," Theory into Practice, IX (October, 1970), 232-238.

Carnegie Commission on Higher Education. Institutional Aid. New York: McGraw-Hill Book Co., 1972.

\_\_\_\_\_. The Open Door Colleges. New York: McGraw-Hill Book Co., 1970.

\_\_\_\_\_. Quality and Equality: New Levels of Federal Responsibility for Higher Education. New York: McGraw-Hill Book Co., December, 1968.

\_\_\_\_\_. Quality and Equality: Revised Recommendations. New York: McGraw-Hill Book Co., June, 1970.

Chambers, M. M. Higher Education in the Fifty States. Danville, Ill.: Interstate Printers & Publishers, Inc., 1970.

\_\_\_\_\_. Higher Education: Who Pays? Who Gains? Interstate Printers & Publishers, Inc., 1968.

Clurman, Michael. "How Shall We Finance Higher Education?" Public Interest, XIX (Spring, 1970), 98-110.

Commager, Henry Steele. "Social, Political, Economic and Personal Consequences," in Universal Higher Education. Ed. Earl G. McGrath. New York: McGraw-Hill Book Co., 1966.

Dixon, W. J. (ed.). BMD Biomedical Computer Programs. Berkley, California: University of California Press, 1970.

Education Policies Commission. Universal Opportunity for Education Beyond the High School. Washington, D. C.: National Education Association, 1964.

Hsien, Lu. Federal Role in Education. New York: American Press Publications, Inc., 1965.

Johns, Roe L. and Alexander, Kern (eds.). Alternative Programs for Financing Education. Gainesville, Florida: National Education Finance Project, 1971.

Johns, R. L., Alexander, Kern, and Jordan, K. Forbis (eds.). Financing Education, Fiscal and Legal Alternatives. Gainesville, Florida: National Education Finance Project, 1971.

Johns, R. L., Alexander K., and Stollar, D. H. (eds.). Status and Impact of Educational Finance Programs. Gainesville, Florida: National Education Finance Project, 1971.

Johns, R. L. and Morphet, Edgar L. The Economics and Financing of Education. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1969.

. Financing the Public Schools. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1960.

Kerlinger, Fred N. Foundations of Behavioral Research. New York: Holt, Rinehart, and Winston, 1964.

Millard, Richard M. "The Necessity of Coordinating State and Federal Support for Community Colleges," in Agenda for National Action. Washington, D. C.: American Association of Community and Junior Colleges, 1972.

Moynihan, Daniel P. "On Universal Higher Education," in Higher Education for Everybody? Ed. W. Todd Furniss. Washington, D. C.: American Council on Education, 1971.

Orwig, Mel (ed.). Financing Higher Education: Alternatives for the Federal Government. Iowa City: The American College Testing Program, 1971.

President's Commission on Higher Education. Higher Education for American Democracy, Vol. I Establishing the Goals. Washington, D. C.: U. S. Government Printing Office, 1947.

. Higher Education for American Democracy, Vol. II Equalizing and Expanding Individual Opportunity. Washington, D. C.: U. S. Government Printing Office, 1947.

. Higher Education for American Democracy, Vol. V Financing Higher Education. Washington, D. C.: U. S. Government Printing Office, 1947.

President's Committee on Education Beyond the High School. Second Report to the President. Washington, D. C.: U. S. Government Printing Office, 1957.

President's Task Force on Higher Education. Priorities in Higher Education. Washington, D. C.: U. S. Government Printing Office, 1970.

Rainsford, George N. Congress and Higher Education in the Nineteenth Century. Knoxville: University of Tennessee Press, 1972.

Rivlin, Alice. The Role of the Federal Government in Financing Higher Education. Washington, D. C.: Brookings Institution, 1961.

Simon, Kenneth A. and Vance, Grant W. Digest of Educational Statistics, 1971 Edition. Washington, D. C.: U. S. Government Printing Office, 1971.

Stein, Jay W. "Financing College for Everyone," Peabody Journal of Education, XLVII, No. 3 (November, 1969), 147-151.

United States. The Budget of the United States Government, Appendix Fiscal Year 1971. Washington, D. C.: U. S. Government Printing Office, 1972.

\_\_\_\_\_. Digest of Public General Bills and Selected Resolutions 88th Congress. Washington, D. C.: Library of Congress Legislative Reference Service, 1964.

\_\_\_\_\_. Public Law 89-751, Allied Health Professions Act. Washington, D. C.: Government Printing Office, 1966.

\_\_\_\_\_. Public Law 88-204, Higher Education Facilities Act. Washington, D. C.: U. S. Government Printing Office, 1963.

\_\_\_\_\_. Public Law 92-318, Education Amendments of 1972. Washington, D. C.: Government Printing Office, 1972.

\_\_\_\_\_. Statutes at Large, Vol. LXX; LXXVII; LXXIX; LXXXII.

United States Bureau of the Census. Statistical Abstract of the United States. Washington, D. C.: U. S. Government Printing Office, 1972.

United States Department of Health, Education, and Welfare. Vocational and Technical Education Annual Report, Fiscal Year 1969. Washington, D. C.: U. S. Government Printing Office, 1971.

Wattenbarger, James, Cage, Bob N., and Arney, L. H. "Financing Public Community Colleges," in Establishing Legal Bases for Community Colleges. Washington, D. C.: American Association of Junior Colleges, 1961.

Willingham, Warren. Universal Access to Higher Education.  
San Francisco: Jossey-Bass, 1971.

Windham, Douglas M. Education, Equity and Income Redistribution. Lexington, Mass.: D. C. Heath & Co., 1970.

Wolk, Ronald A. Alternative Methods of Federal Funding for Higher Education. Berkeley, California:  
Carnegie Commission on Higher Education, 1968.



### BIOGRAPHICAL SKETCH

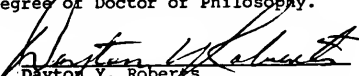
Charles Richard Paulson was born January 11, 1933, at Elbow Lake, Minnesota. He received the degree of Bachelor of Science from Concordia College, Moorhead, Minnesota in August, 1957, with a major in economics. He taught in the public school systems of McIntosh, Minnesota and Grand Forks, North Dakota, where he also served as a supervisor of student teachers. He received the degree of Master of Science from the University of North Dakota in August, 1964. He served as Visiting Professor of Economics at Southern Oregon State College and taught in the School of Business, Mankato State College, Mankato, Minnesota from 1968 to 1971. In September, 1971, he received an EPDA fellowship for educational leadership and entered the University of Florida to work toward the degree of Doctor of Philosophy in Education.

Charles Richard Paulson is married and has four children. He is a member of Phi Delta Kappa, the American Association of Higher Education and the American Association of Community and Junior Colleges.

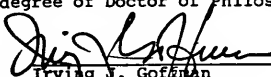
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
James L. Wattenbarger, Chairman  
Professor of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

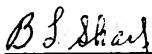
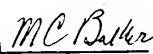
  
Dayton V. Roberts  
Associate Professor of Education

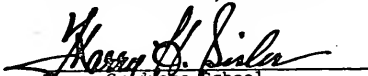
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

  
Irving J. Goffman  
Professor of Economics

This dissertation was submitted to the Dean of the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1973

   
Dean, College of Education

  
Dean, Graduate School